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COUNCIL DIRECTIVE

of 27 July 1976

on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations

(76/769/EEC)

(OJ L 262, 27.9.1976, p. 201)

Amended by:

		Official Journal		
		No	page	date
►M1	Council Directive of 24 July 1979 (79/663/EEC)	L 197	37	3.8.1979
►M2	Council Directive of 22 November 1982 (82/806/EEC)	L 339	55	1.12.1982
►M3	Council Directive of 3 December 1982 (82/828/EEC)	L 350	34	10.12.1982
►M4	Council Directive of 16 May 1983 (83/264/EEC)	L 147	9	6.6.1983
►M5	Council Directive of 19 September 1983 (83/478/EEC)	L 263	33	24.9.1983
►M6	Council Directive of 1 October 1985 (85/467/EEC)	L 269	56	11.10.1985
►M7	Council Directive of 20 December 1985 (85/610/EEC)	L 375	1	31.12.1985
►M8	Council Directive of 21 December 1989 (89/677/EEC)	L 398	19	30.12.1989
►M9	Council Directive of 21 December 1989 (89/678/EEC)	L 398	24	30.12.1989
►M10	Council Directive of 18 March 1991 (91/157/EEC)	L 78	38	26.3.1991
►M11	amended by Commission Directive 98/101/EC of 22 December 1998	L 1	1	5.1.1999
►M12	Council Directive of 21 March 1991 (91/173/EEC)	L 85	34	5.4.1991
►M13	Council Directive of 18 June 1991 (91/338/EEC)	L 186	59	12.7.1991
►M14	Council Directive of 18 June 1991 (91/339/EEC)	L 186	64	12.7.1991
►M15	Commission Directive of 3 December 1991 (91/659/EEC)	L 363	36	31.12.1991
►M16	European Parliament and Council Directive 94/27/EC of 30 June 1994	L 188	1	22.7.1994
►M17	European Parliament and Council Directive 94/48/EC of 7 December 1994	L 331	7	21.12.1994
►M18	European Parliament and Council Directive 94/60/EC of 20 December 1994	L 365	1	31.12.1994
►M19	Commission Directive 96/55/EC of 4 September 1996	L 231	20	12.9.1996
►M20	Commission Directive 97/10/EC of 26 February 1997	L 68	24	8.3.1997
►M21	Directive 97/16/EC of the European Parliament and of the Council of 10 April 1997	L 116	31	6.5.1997
►M22	Commission Directive 97/64/EC of 10 November 1997	L 315	13	19.11.1997
►M23	Directive 97/56/EC of the European Parliament and of the Council of 20 October 1997	L 333	1	4.12.1997
►M24	Commission Directive 1999/51/EC of 26 May 1999	L 142	22	5.6.1999
►M25	Directive 1999/43/EC of the European Parliament and of the Council of 25 May 1999	L 166	87	1.7.1999
►M26	Commission Directive 1999/77/EC of 26 July 1999	L 207	18	6.8.1999
►M27	Directive 2001/41/EC of the European Parliament and of the Council of 19 June 2001	L 194	36	18.7.2001
►M28	Commission Directive 2001/90/EC of 26 October 2001	L 283	41	27.10.2001
►M29	Commission Directive 2001/91/EC of 29 October 2001	L 286	27	30.10.2001

►**M30**	Directive2002/45/EC of the European Parliament and of the Council of 25 June 2002	L 177	21	6.7.2002
►**M31**	Commission Directive 2002/62/EC of 9 July 2002	L 183	58	12.7.2002
►**M32**	Directive 2002/61/EC of the European Parliament and of the Council of 19 July 2002	L 243	15	11.9.2002
►**M33**	Commission Directive 2003/2/EC of 6 January 2003	L 4	9	9.1.2003
►**M34**	Commission Directive 2003/3/EC of 6 January 2003	L 4	12	9.1.2003
►**M35**	Directive 2003/11/EC of the European Parliament and of the Council of 6 February 2003	L 42	45	15.2.2003
►**M36**	Directive 2003/34/EC of the European Parliament and of the Council of 26 May 2003	L 156	14	25.6.2003
►**M37**	Directive 2003/36/EC of the European Parliament and of the Council of 26 May 2003	L 156	26	25.6.2003
►**M38**	Directive 2003/53/EC of the European Parliament and of the Council of 18 June 2003	L 178	24	17.7.2003
►**M39**	Commission Directive 2004/21/EC of 24 February 2004	L 57	4	25.2.2004
►**M40**	Commission Directive 2004/96/EC of 27 September 2004	L 301	51	28.9.2004
►**M41**	Commission Directive 2004/98/EC of 30 September 2004	L 305	63	1.10.2004
►**M42**	Directive 2005/59/EC of the European Parliament and of the Council of 26 October 2005	L 309	13	25.11.2005
►**M43**	Directive 2005/69/EC of the European Parliament and of the Council of 16 November 2005	L 323	51	9.12.2005
►**M44**	Directive 2005/84/EC of the European Parliament and of the Council of 14 December 2005	L 344	40	27.12.2005
►**M45**	Directive 2005/90/EC of the European Parliament and of the Council of 18 January 2006	L 33	28	4.2.2006
►**M46**	Directive 2006/122/ECof the European Parliament and of the Council of 12 December 2006	L 372	32	27.12.2006
►**M47**	Commission Directive 2006/139/EC of 20 December 2006	L 384	94	29.12.2006
►**M48**	Directive 2007/51/EC of the European Parliament and of the Council of 25 September 2007	L 257	13	3.10.2007
►**M49**	Regulation (EC) No 1137/2008 of the European Parliament and of the Council of 22 October 2008	L 311	1	21.11.2008

Corrected by:

►**C1** Corrigendum, OJ L 250, 23.9.1999, p. 14 (89/677/EEC)
►**C2** Corrigendum, OJ L 216, 14.8.1999, p. 25 (97/10/EG)
►**C3** Corrigendum, OJ L 268, 1.10.1997, p. 38 (97/16/EC)
►**C4** Corrigendum, OJ L 203, 1.8.2002, p. 64 (2002/62/EC)
►**C5** Corrigendum, OJ L 170, 9.7.2003, p. 31 (2003/11/EC)
►**C6** Corrigendum, OJ L 33, 4.2.2006, p. 88 (2005/84/EC)

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COUNCIL DIRECTIVE

of 27 July 1976

on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations

(76/769/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 100 there of,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Parliament ([1]),

Having regard to the opinion of the Economic and Social Committee ([2]),

Whereas any rules concerning the placing on the market of dangerous substances and preparations must aim at protecting the public, and particular persons using such substances and preparations;

Whereas they should contribute to the protection of the environment from all substances and preparations which have characteristics of ecotoxicity or which could pollute the environment;

Whereas they should also aim to restore, preserve and improve the quality of human life;

Whereas dangerous substances and preparations are governed by rules in the Member States; whereas these rules differ as to the conditions of their marketing and use; whereas these differences constitute an obstacle to trade and directly affect the establishment and functioning of the common market;

Whereas this obstacle should therefore be removed; whereas this entails approximating the laws governing the matter in the Member States;

Whereas provisions relating to certain dangerous substances and preparations have already been laid down in Community Directives; whereas it is still necessary to establish rules for other products, in particular for those in respect of which international organizations have decided on restrictions such as polychlorinated biphenyls (PCB), a decision restricting the production and use of which was adopted by the Council of the OECD on 13 February 1973; whereas such a measure is necessary to prevent the absorption of PCB by the human body and the resultant danger to human health;

Whereas detailed examinations have shown that polychlorinated terphenyls (PCT) entail risks similar to those presented by PCBs; whereas the marketing and use of such substances should also be restricted;

Whereas it will be necessary, moreover, periodically to review the whole problem with a view to moving gradually towards a complete ban on PCBs and PCTs;

Whereas the use of chloro-1-ethylene (monomer vinyl chloride) as an aerosol propellant involves dangers to human health and the use thereof should be prohibited,

HAS ADOPTED THIS DIRECTIVE:

([1]) OJ No C 60, 13. 3. 1975, p. 49.
([2]) OJ No C 16, 23. 1. 1975, p. 25.

▼B

Article 1

1. Without prejudice to the application of other relevant Community provisions, this Directive is concerned with restricting the marketing and use in the Member States of the Community, of the dangerous substances and preparations listed in the Annex.

2. This Directive shall not apply to:

(a) the carriage of dangerous substances and preparations by rail, road, inland waterway, sea or air;

(b) dangerous substances and preparations exported to non-member countries;

(c) substances and preparations in transit and subject to customs inspection, provided that they undergo no processing.

3. For the purposes of this Directive:

(a) 'substances' means chemical elements and their compounds as they occur in the natural state or as produced by industry;

(b) 'preparations' means mixtures or solutions composed of two or more substances;

▼M44

(c) 'childcare article' means any product intended to facilitate sleep, relaxation, hygiene, the feeding of children or sucking on the part of children.

▼B

Article 2

Member States shall take all neccessary (SIC! necessary) measures to ensure that the dangerous substances and preparations listed in the Annex may only be placed on the market or used subject to the conditions specified therein. Such restrictions shall not apply to marketing or use for Research and Development or analysis purposes.

▼M49

Article 2a

The Commission may adapt the Annexes to this Directive to technical progress with regard to substances and preparations covered by this Directive. Those measures, designed to amend non-essential elements of this Directive, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 2b(2). On imperative grounds of urgency, the Commission may have recourse to the urgency procedure referred to in Article 2b(3).

Article 2b

1. The Commission shall be assisted by the Committee established by Article 29(1) of Council Directive 67/548/EEC ([1])

2. Where reference is made to this paragraph, Article 5a(1) to (4) and Article 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

3. Where reference is made to this paragraph, Article 5a(1), (2), (4) and (6) and Article 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

([1]) OJ 196, 16.8.1967, p. 1.

▼B

Article 3

1. Member States shall bring into force the provisions necessary to comply with this Directive within 18 months of its notification and shall forthwith inform the Commission thereof.

2. Member States shall communicate to the Commission the text of the provisions of national law which they adopt in the field covered by this Directive.

Article 4

This Directive is addressed to the Member States.

▼B

►M5 *ANNEX I* ◄

Designation of the substance, of the groups of substances or of the preparation	Conditions of restriction
▼M6	
1. — Polychlorinated biphenyls (PCB) except mono- and dichlorinated biphenyls — Polychlorinated terphenyls (PCTs) — Preparations, including waste oils, with a PCB or PCT content higher than ►M8 0,005 % ◄ by weight.	May not be used. However, the following categories may be used under the following conditions: 1. until 30 June 1986 at the latest: closed-system electrical equipment transformers, resistors and inductors; 2. until 30 June 1986 at the latest: large condensers (≥ 1 kg total weight); 3. until 30 June 1986 at the latest: small condensers (provided that the PCB has a maximum chlorine content of 43 % and does not contain more than 3,5 % of penta- and higher chlorinated biphenyls); 4. until 30 June 1986 at the latest: heat-transmitting fluids in closed-circuit heat-transfer installations: 5. until 30 June 1986 at the latest: hydraulic fluids for underground mining equipment; — The use of equipment, plant and fluids referred to in points 1 to 5 above which are in service on 30 June 1986 shall continue to be authorized until they are disposed of or reach the end of their service life. — Member States may, for reasons of protection of health and the environment, prohibit within their territory the use of such equipment, plant and fluids before they are disposed of or reach the end of their service life. — The placing on the second-hand market of such equipment, plant and fluids which are not intended for disposal shall be prohibited from 30 June 1986 onwards. — Where the Member States consider that it is not possible for technical reasons to use substitute products, they may continue to authorize the use of PCBs, PCTs and preparations thereof where the latter are solely intended, in the normal conditions of maintenance of equipment, to supplement the level of liquids containing PCBs in properly functioning existing plant purchased before the entry into force of this Directive. 6. until 30 June 1986 at the latest: primary and intermediate products for further processing into other products not prohibited by Directive 76/769/EEC and the Directives amending it; after 30 June 1986 Member States may, provided prior notification stating the reasons is sent to the Commission, grant derogations from the ban on the marketing and use of such primary and intermediate products, in so far as they consider that these derogations have no deleterious effects on health and the environment.
▼B	
2. Chloro-1-ethylene (monomer vinyl chloride)	May not be used as aerosol propellant for any use whatsoever.

▼M22

3.	Liquid substances or preparations, which are regarded as dangerous according to the definitions in Article 2 (2) and the criteria in Annex VI, Part 2, 3 and 4, to Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances ([1]), as adapted to technical progress by Commission Directives 93/21/EEC ([2]) and 96/54/EC ([3]).	1. May not be used in — ornamental objects, intended to produce light or colour effects my means of different phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any object intended to be used as such, even with ornamental aspects. 2. Without prejudice to the above, substances and preparations which: — present an aspiration hazard and are labelled with R65, and — can be used as fuel in decorative lamps, and — are placed on the market in packaging of a capacity of 15 litres or less, may not contain a colouring agent, unless required for fiscal reasons, or perfume or both. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and preparations, the packaging of substances and preparations covered by paragraph 2, where intended for use in lamps, must be marked legibly and indelibly as follows: 'Keep lamps filled with this liquid out of the reach of children'.

▼M1

4.	Tris (2,3 dibromopropyl) phosphate CAS No (Chemical Abstract Service Number) 126-72-7	May not be used in textile articles, such as garments, undergarments and linen, intended to come into contact with the skin.

▼M2

5.	Benzene CAS Nº (Chemical Abstract Service Number) 71-43-2	Not permitted in toys or parts of toys as placed on the market where the concentration of benzene in the free state is in excess of 5 mg/kg of the weight of the toy or part of toy.

▼M8

		May not be used in concentrations equal to, or greater than, 0,1 % by mass in substances or preparations placed on the market. However, this provision shall not apply to: (a) motor fuels which are covered by Directive 85/210/EEC; (b) substances and preparations for use in industrial processes not allowing for the emission of benzene in quantities in excess of those laid down in existing legislation; (c) waste covered by Directives 75/442/EEC ([4]) and 78/319/EEC ([5]).

▼M5

►M7 6. ◄ Asbestos fibres

▼M26

6.1.	Crocidolite, CAS No 12001-28-4 Amosite, CAS No 12172-73-5 Anthophyllite asbestos, CAS No 77536-67-5 Actinolite asbestos, CAS No 77536-66-4 Tremolite asbestos, CAS No 77536-68-6	6.1. The placing on the market and use of these fibres and of products containing these fibres added intentionally shall be prohibited.

▼M26

6.2. Chrysotile, CAS No 12001-29-5	6.2. The placing on the market and use of this fibre and of products containing this fibre added intentionally shall be prohibited. However, Member States may except diaphragms for existing electrolysis installations until they reach the end of their service life, or until suitable asbestos-free substitutes become available, whichever is the sooner. The Commission will review this derogation before 1 January 2008. The use of products containing asbestos fibres referred to in points 6.1 and 6.2 which were already installed and/or in service before the implementation date of Directive 1999/77/EC by the Member State concerned shall continue to be authorised until they are disposed of or reach the end of their service life. However, Member States may, for reasons of protection of health, prohibit within their territory the use of such products before they are disposed of or reach the end of their service life. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of dangerous substances and preparations, the placing on the market and use of these fibres and of products containing these fibres, as authorised according to the preceeding derogations, may be permitted only if the products bear a label in accordance with the provisions of Annex II to Directive 76/769/EEC.

▼M7

6.3. Asbestos fibres Chrysotile, CAS No 12001-29-5 Amosite, CAS No 12172-73-5 Anthophyllite, CAS No 77536-67-5 Actinolite, CAS No 77536-66-4 Tremolite, CAS No 77536-68-6	6.3.1. The placing on the market and the use of products containing these fibres shall be prohibited for: (a) toys; (b) materials or preparations intended to be applied by spraying; Member States may, however, allow on their territories butiminous compounds containing asbestos intended to be applied by spraying as vehicle undersealing for anti-corrosion protection; (c) finished products which are retailed to the public in powder form; (d) items for smoking such as tobacco pipes and cigarette and cigar holders; (e) catalytic filters and insulation devices for incorporation in catalytic heaters using liquefied gas; (f) paints and varnishes.

▼M4

8. Tris-aziridinyl)-phosphinoxide CAS Nº 5455-55-1 9. Polybromobiphenyls (PBB) CAS Nº 59536-65-1	May not be used in textile articles, such as garments, undergarments and linen, intended to come into contact with the skin

▼M4

10.	Soap bark powder *(Quillaja saponaria)* and its derivatives containing saponines Powder of the roots of *Helleborus viridis* and *Helleborus niger* Powder of the roots of *Veratrum album* and *Veratrum nigrum* Benzidine and/or its derivatives *o*-nitrobenzaldehyde CAS Nº 552-89-6 Wood powder	May not be used in jokes and hoaxes or in objects intended to be used as such, for instance as a constituent of sneezing powder and stink bombs However, Member States may tolerate on their territory stink bombs containing not more than 1,5 ml
11.	Ammonium sulphide and ammonium hydrogen sulphide CAS Nº 12135-76-1 CAS Nº 12124-99-1 Ammonium polysulphide CAS Nº 12259-92-6	
12.	Volatile esters of bromoacetic acids: Methyl bromoacetate CAS Nº 96-32-2 Ethyl bromoacetate CAS Nº 105-36-2 Propyl bromoacetate Butyl bromoacetate	

▼M8

13.	2-naphthylamine CAS No 91-59-8 and its salts	May not be used in concentrations equal to or greater than 0,1 % by weight in substances and preparations placed on the market. However, this provision shall not apply to waste containing one or more of these substances and covered by Directives 75/442/EEC and 78/319/EEC.
14.	Benzidine CAS No 92-87-5 and its salts	
15.	4-nitrobiphenyl CAS No 92-93-3	
16.	4-aminobiphenyl CAS No 92-67-1 and its salts	Such substances and preparations may not be sold to the general public. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of dangerous substances and preparations, the packaging of such preparations shall be legible and indelibly marked as follows: Restricted to professional users.
17.	Lead carbons: — neutral anhydrous carbonate PB CO_3 CAS No 598-63-0 — ►C1 trilead-bis(carbonate)-dihydroxide ◄ 2 Pb CO_3-$Pb(OH)_2$ CAS No 1319-46-6	May not be used as substances and constituents of preparations intended for use as paints, except for the restoration and maintenance of works of art and historic buildings and their interiors, where Member States wish to authorize this on their territory, in accordance with the provisions of ILO Convention 13 on the use of white lead in paint.
18.	Lead sulphates $PbSO_4$ (1:1) CAS No 7446-14-2 Pb_x SO_4 CAS No 15739-80-7	May not be used as substances and constituents of preparations intended for use as paints, except for the restoration and maintenance of works of art and historic buildings and their interiors, where Member States wish to authorize this on their territory, in accordance with the provisions of ILO Convention 13 on the use of sulphates of lead in paint.

▼M10

►M11 Member States shall prohibit, as from 1 January 2000 at the latest, the marketing of batteries and accumulators, containing more than 0,0005 % of mercury by weight, including in those cases where these batteries and accumulators are incorporated into appliances. Button cells and batteries composed of button cells with a mercury content of no more than 2 % by weight shall be exempted from this prohibition. ◄

▼M8

19.	Mercury compound	May not be used as substances and constituents of preparations intended for use: (a) to prevent the fouling by micro-organisms, plants or animals of: — the hulls of boats, — cages, floats, nets and any other appliances or equipment used for fish or shellfish farming, — any totally or partly submerged appliances or equipment; (b) in the preservation of wood; (c) in the impregnation of heavy-duty industrial textiles and yarn intended for their manufacture; (d) in the treatment of industrial waters, irrespective of their use.

▼M48

19a	Mercury CAS No 7439-97-6	1. May not be placed on the market: (a) in fever thermometers; (b) in other measuring devices intended for sale to the general public (e.g. manometers, barometers, sphygmomanometers, thermometers other than fever thermometers). 2. The restriction in paragraph 1(b) shall not apply to: (a) measuring devices more than 50 years old on 3 October 2007; or (b) barometers (except barometers within point (a)) until 3 October 2009. 3. By 3 October 2009 the Commission shall carry out a review of the availability of reliable safer alternatives that are technically and economically feasible for mercury-containing sphygmomanometers and other measuring devices in healthcare and in other professional and industrial uses. On the basis of this review or as soon as new information on reliable safer alternatives for sphygmomanometers and other measuring devices containing mercury becomes available, the Commission shall, if appropriate, present a legislative proposal to extend the restrictions in paragraph 1 to sphygmomanometers and other measuring devices in healthcare and in other professional and industrial uses, so that mercury in measuring devices is phased out whenever technically and economically feasible.

▼M47

20.	Arsenic Compounds	1. Shall not be placed on the market or used as substances and constituents of preparations intended for use to prevent the fouling by micro-organisms, plants or animals of: — the hulls of boats,

▼M47

— cages, floats, nets and any other appliances or equipment used for fish or shellfish farming,

— any totally or partly submerged appliances or equipment;

2. Shall not be placed on the market or used as substances and constituents of preparations intended for use in the treatment of industrial waters, irrespective of their use.

3. Shall not be used in the preservation of wood. Furthermore, wood so treated shall not be placed on the market;

4. However, by way of derogation:

(a) Relating to the substances and preparations for the preservation of wood: these may only be used in industrial installations using vacuum or pressure to impregnate wood if they are solutions of inorganic compounds of the copper, chromium, arsenic (CCA) type C and if they are authorised in accordance with Article 5(1) of Directive 98/8/EC. Wood so treated shall not be placed on the market before fixation of the preservative is completed.

(b) Wood treated with CCA solutions in industrial installations according to point (a) may be placed on the market for professional and industrial use provided that the structural integrity of the wood is required for human or livestock safety and skin contact by the general public during its service life is unlikely:

— as structural timber in public and agricultural buildings, office buildings, and industrial premises,

— in bridges and bridgework,

— as constructional timber in freshwater areas and brackish waters e.g. jetties and bridges,

— as noise barriers,

— in avalanche control,

— in highway safety fencing and barriers,

— as debarked round conifer livestock fence posts,

— in earth retaining structures,

— as electric power transmission and telecommunications poles,

— as underground railway sleepers.

(c) Without prejudice to the application of other Community provisions on the classification, packaging and labelling of dangerous substances and preparations, all treated wood placed on the market shall be individually labelled ‘For professional and industrial installation and use only, contains arsenic’. In addition, all wood placed on the market in packs shall also bear a label stating ‘Wear gloves when handling this wood. Wear a dust mask and eye protection when cutting or otherwise crafting this wood. Waste from this wood shall be treated as hazardous by an authorised undertaking’.

▼M47

(d) Treated wood referred to under point (a) shall not be used:

— in residential or domestic constructions, whatever the purpose,

— in any application where there is a risk of repeated skin contact,

— in marine waters,

— for agricultural purposes other than for livestock fence posts and structural uses in accordance with point (b),

— in any application where the treated wood may come into contact with intermediate or finished products intended for human and/or animal consumption.

5. Wood treated with arsenic compounds that was in use in the Community before 30 September 2007, or that was placed on the market in accordance with the rules of this Directive may remain in place and continue to be used until it reaches the end of its service life.

6. Wood treated with CCA type C that was in use in the Community before 30 September 2007, or that was placed on the market in accordance with the rules of this Directive:

— may be used or reused subject to the conditions pertaining to its use listed under point 4(b), (c) and (d),

— may be placed on the second hand market subject to the conditions pertaining to its use listed under point 4(b), (c) and (d).

7. Member States may allow wood treated with other types of CCA solutions that was in use in the Community before 30 September 2007:

— to be used or reused subject to the conditions pertaining to its use listed under point 4 (b), (c) and (d),

— to be placed on the second hand market subject to the conditions pertaining to its use listed under point 4(b), (c) and (d).

▼M31

21. Organostannic compounds

1. May not be placed on the market for use as substances and constituents of preparations when acting as biocides in free association paint.

2. May not be placed on the market or used as substances and constituents of preparations which act as biocides to prevent the fouling by microorganisms, plants or animals of:

►C4 (a) all craft ◄ irrespective of their length intended for use in marine, coastal, estuarine and inland waterways and lakes;

(b) cages, floats, nets and any other appliances or equipment used for fish or shellfish farming;

(c) any totally or partly submerged appliance or equipment.

3. May not be used as substances and constituents of preparations intended for use in the treatment of industrial waters.

▼M8

22.	di-μ-oxo-di-n-butylstanniohydroxyborane ($C_8H_{19}BO_3S_n$, CAS No 75113-37-0) (DBB)	Shall be prohibited in a concentration equal to or greater than 0,1 % in substances and constituents of preparations placed on the market. However, this provision shall not apply to this substance (DBB) or preparations containing it if these are intended solely for conversion into finished products, among which this substance will no longer feature in a concentration equal to or greater than 0,1 %.

▼M24

23.	Pentachlorophenol (CAS No 87-86-5) and its salts and esters	Shall not be used in a concentration equal to or greater than 0,1 % by mass in substances or preparations placed on the market. By way of derogation until 31 December 2008 France, Ireland, Portugal, Spain and the United Kingdom may chose not to apply this provision to substances and preparations intended for use in industrial installations not permitting the emission and/or discharge of pentachlorophenol (PCP) in quantities greater than those prescribed by existing legislation: (a) in the treatment of wood. However, treated wood may not be used: — inside buildings whether for decorative purposes or not, whatever their purpose (residence, employment, leisure), — for the manufacture and re-treatment of: (i) containers intended for growing purposes; (ii) packaging that may come into contact with raw materials, intermediate or finished products destined for human and/or animal consumption; (iii) other materials that may contaminate the products mentioned in (i) and (ii); (b) in the impregnation of fibres and heavy-duty textiles not intended in any case for clothing or for decorative furnishings; (c) by way of special exception, Member States may on a case-by-case basis, authorise on their territory specialised professionals to carry out *in situ* and for buildings of cultural, artistic and historical interest, or in emergencies, a remedial treatment of timber and measonry infected by dry rot fungus *(Serpula lacrymans)* and cubic rot fungi. In any case: (a) Pentachlorophenol used alone or as a component of preparations employed within the framework of the above exceptions must have a total hexachlorodibenzoparadioxin (HCDD) content of not more than two parts per million (ppm); (b) these substances and preparations may not: — be placed on the market except in packages of 20 litres or more; — be sold to the general public. Without prejudice to the implementation of other Community provisions concerning the classification, packaging and labelling of dangerous substances and preparations, the packaging of such preparations should be marked clearly and indelibly: Reserved for industrial and professional use In addition, this provision shall not apply to wast covered by Directives 75/442/EEC ([4]) and 91/689/EEC ([17]).

▼**M13**

24.	Cadmium (CAS No 7440-43-9) and its compounds	1.1.	May not be used to give colour to finished products manufactured from the substances and preparations listed below: — polyvinyl chloride (PVC) [390410] [390421] [390422] (6) — polyurethane (PUR) [390950] (6) — low-density polyethylene (ld PE), with the exception of low-density polyethylene used for the production of coloured masterbatch [390110] (6) — cellulose acetate (CA) [391211] [391212] (6) — cellulose acetate butyrate (CAB) [391211] [391212] (6) — epoxy resins [390730] (6) In any case, whatever their use or intended final purpose, finished products or components of products manufactured from the substances and preparations listed above coloured with cadmium may not be placed on the market if their cadmium content (expressed as Cd metal) exceeds 0,01 % by mass of the plastic material.
		1.2.	Section 1.1 also applies from 31 December 1995 for: (a) finished products manufactured from the following substances and preparations: — melamine — formaldehyde (MF) [390920] (6) — urea — formaldehyde (UF) [390910] (6) — unsaturated polyesters (UP) [390791] (6) — polyethylene terephthalate (PET) [390760] (6) — polybutylene terephthalate (PBT) — transparent/general-purpose polystyrene [390311] [390319] (6) — acrylonitrile methylmethacrylate (AMMA) — cross-linked polyethylene (VPE) (6) — high-impact polystyrene — polypropylene (PP) [390210] (6) (b) paints [3208] [3209] (6) However, if the paints have a high zinc content, their residual concentration of cadmium must be as low as possible and at all events not exceed 0,1 % by mass.
		1.3.	However, Sections 1.1 and 1.2 do not apply to products to be coloured for safety reasons.
		2.1.	May not be used to stabilize the finished products listed below manufactured from polymers or copolymers of vinyl chloride: — packaging materials (bags, containers, bottles, lids) [39232910] [392041] [392042] (6) — office or school supplies [392610] (6) — fittings for furniture, coachwork or the like [392630] (6) — articles of apparel and clothing accessories (including gloves) [392620] (6)

▼**M13**

— floor and wall coverings [391810] (6)

— impregnated, coated, covered or laminated textile fabrics [590310] (6)

— imitation leather [4202] (6)

— gramophone records [852410] (6)

— tubes and pipes and their fittings [391723] (6)

— swing doors (6)

— vehicles for road transport (interior, exterior, underbody) (6)

— coating of steel sheet used in construction or in industry (6)

— insulation for electrical wiring (6)

In any case, whatever their use or intended final purpose, the placing on the market of the above finished products or components of products manufactured from polymers or copolymers of vinyl chloride, stabilized by substances containing cadmium is prohibited, if their cadmium content (expressed as Cd metal) exceeds 0,01 % by mass of the polymer.

These provisions enter into force on 30 June 1994.

2.2. However, Section 2.1 does not apply to finished products using cadmium-based stabilizers for safety reasons.

3. Within the meaning of this Directive, 'cadmium plating' means any deposit or coating of metallic cadmium on a metallic surface.

3.1. May not be used for cadmium plating metallic products or components of the products used in the sectors/applications listed below.

(a) equipment and machinery for:

— food production: [8210] [841720] [841981] [842111] [842122] [8422] [8435] [8437] [8438] [847611] (6)

— agriculture [841931] [842481] [8432] [8433] [8434] [8436] (6)

— cooling and freezing [8418] (6)

— printing and book-binding [8440] [8442] [8443] (6)

(b) equipment and machinery for the production of:

— household goods [7321] [842112] [8450] [8509] [8516] (6)

— furniture [8465] [8466] [9401] [9402] [9403] [9404] (6)

— sanitary ware [7324] (6)

— central heating and air conditioning plant [7322] [8403] [8404] [8415] (6)

In any case, whatever their use or intended final purpose, the placing on the market of cadmium-plated products or components of such products used in the sectors/applications listed in (a) and (b) above and of products manufactured in the sectors listed in (b) above is prohibited.

3.2. The provisions referred to in Section 3.1 are also applicable from 30 June 1995 to cadmium-plated products or components of such products when used in the sectors/applications listed in (a)

▼M13

and (b) below and to products manufactured in the sectors listed in (b) below:

(a) equipment and machinery for the production of:

— paper and board [841932] [8439] [8441] (6)

— textiles and clothing [8444] (1) [8445] [8447] [8448] [8449] [8451] [8452] (6)

(b) equipment and machinery for the production of:

— industrial handling equipment and machinery [8425] [8426] [8427] [8428] [8429] [8430] [8431] (6)

— road and agricultural vehicles [chapter 87] (6)

— rolling stock [chapter 86] (6)

— vessels [chapter 89] (6)

3.3. However, Sections 3.1 and 3.2 do not apply to:

— products and components of the products used in the aeronautical, aerospace, mining, offshore and nuclear sectors whose applications require high safety standards and in safety devices in road and agricultural vehicles, rolling stock and vessels,

— electrical contacts in any sector of use, on account of the reliability required of the apparatus on which they are installed.

▼M24

4. Austria and Sweden, which already apply restrictions to cadmium going further than those prescribed in Sections 1, 2 and 3 may continue to apply these restrictions until 31 December 2002. The Commission will review the provisions on cadmium in Annex I to Directive 76/769/EEC before this date in light of the results of risk assessment for cadmium and of development of knowledge and techniques in respect of substitutes for cadmium.

▼M14

25. Monomethyl — tetrachlorodiphenyl methane
Trade name: Ugilec 141
CAS No 76253-60-6

As from 18 June 1994 the marketing and use of this substance and of preparations and products containing it shall be prohibited. By way of exception this provision shall not apply:

1) in the case of plant and machinery already in service on 18 June 1994 until such plant and machinery is disposed of.

However, as from 18 June 1994 Member States may, on grounds of health protection and environmental protection, prohibit within their territory the use of such plant or machinery before it is disposed of;

2) in the case of the maintenance of plant and machinery already in service on 18 June 1994.

As from 18 June 1994 the placing on the secondhand market of this substance, preparations containing this substance and plant/machinery containing this substance, shall be prohibited.

26. Monomethyl-dichloro-diphenyl methane
Trade name: Ugilec 121, Ugilec 21
CAS No — unknown

The marketing and use of this substance and of preparations and products containing it shall be prohibited.

▼**M14**

27.	Monomethyl-dibromo-diphenyl methane Trade name: DBBT CAS No 99688-47-8	The marketing and use of this substance and of preparations and products containing it shall be prohibited.

▼**M16**

28.	Nickel CAS No 7440-02-0 EINECS No 2311114 and its compounds	May not be used: ►**M40** 1) in all post assemblies which are inserted into pierced ears and other pierced parts of the human body unless the rate of nickel release from such post assemblies is less than 0,2 μg/cm^2/week (migration limit); ◄ 2) in products intended to come into direct and prolonged contact with the skin such as: — earrings, — necklaces, bracelets and chains, anklets, finger rings, — wrist-watch cases, watch straps and tighteners, — rivet buttons, tighteners, rivets, zippers and metal marks, when these are used in garments if the rate of nickel release from the parts of these products coming into direct and prolonged contact with the skin is greater than 0,5 μg/cm^2/week; 3) in products such as those listed in point 2 where these have a non-nickel coating unless such coating is sufficient to ensure that the rate of nickel release from those parts of such products coming into direct and prolonged contact with the skin will not exceed 0,5 ug/cm^2/week for a period of at least two years of normal use of the product. Furthermore, products which are the subject of points 1, 2 and 3, may not be placed on the market unless they conform to the requirements set out in those points

▼**M20**

29.	Substances which appear in Annex I to Directive 67/548/EEC classified as carcinogen category 1 or carcinogen category 2 and labelled at least as 'Toxic (T)' with risk phrase R 45: 'May cause cancer' or risk phrase R49: 'May cause cancer by inhalation', and listed as follows: Carcinogen category 1: See List 1 in the Appendix. Carcinogen category 2: See List 2 in the Appendix.	Without prejudice to the other points of Annex I to Directive 76/769/EEC: May not be used in substances and preparations placed on the market for sale to the general public in individual concentration equal to or greater than: — either the concentration specified in Annex I to Council Directive 67/548/EEC ([7]), or — the concentration specified in point 6, Table VI, of Annex I to Council Directive 88/379/EEC ([8]), where no concentration limit appears in Annex I to Directive 67/548/EEC. ►**M23** Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and preparations, the packaging of such substances and preparations must be marked legibly and indelibly as follows: 'Restricted to professional users'. ◄ By way of derogation, this provision shall not apply to: (a) medicinal or veterinary products as defined by Council Directive 65/65/EEC ([9]); (b) cosmetic products as defined by Council Directive 76/768/EEC ([10]); (c) ►**C2** — motor fuels which are covered by Council Directive 85/210/EEC ([11]), — mineral oil products intended for use as fuel in mobile or fixed combustion plants,

▼M20

		— fuels sold in closed systems (e.g. liquid gas bottles); ◄ (d) artists' paints covered by Council Directive 88/379/EEC ([12]).
30.	Substances which appear in Annex I to Directive 67/548/EEC classified as mutagen category 1 or mutagen category 2 and labelled with risk phrase R46: 'May cause heritable genetic damage', and listed as follows: Mutagen category 1: See List 3 in the Appendix. Mutagen category: See List 4 in the Appendix.	Without prejudice to the other points of Annex I to Directive 76/769/EEC May not be used in substances and preparations placed on the market for sale to the general public in individual concentration equal to or greater than: — either the concentration specified in Annex I to Directive 67/548/EEC, or — the concentration specified in point 6, Table VI, of Annex I to Directive 88/379/EEC where no concentration limit appears in Annex I to Directive 67/548/EEC. ►**M23** Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and preparations, the packaging of such substances and preparations must be marked legibly and indelibly as follows: 'Restricted to professional users'. ◄ By way of derogation, this provision shall not apply to: (a) medicinal or veterinary products as defined by Directive 65/65/EEC; (b) cosmetic products as defined by Directive 76/768/EEC; (c) ►**C2** — motor fuels which are covered by Council Directive 85/210/EEC ([11]), — mineral oil products intended for use as fuel in mobile or fixed combustion plants, — fuels sold in closed systems (e.g. liquid gas bottles); ◄ (d) artists' paints covered by Directive 88/379/EEC.
31.	Substances which appear in Annex I to Directive 67/548/EEC classified as toxic to reproduction category 1 or toxic to reproduction category 2 and labelled with risk phrase R60: 'May impair fertility' and/or R61: 'May cause harm to the unborn child', and listed as follows: Toxic to reproduction category 1: See List 5 in the Appendix. Toxic to reproduction category 2: See List 6 in the Appendix.	Without prejudice to the other points of Annex I to Directive 76/769/EEC May not be used in substances and preparations placed on the market for sale to the general public in individual concentration equal to or greater than: — either the concentration specified in Annex I to Directive 67/548/EEC, or — the concentration specified in point 6, Table VI, of Annex I to Directive 88/379/EEC where no concentration limit appears in Annex I to Directive 67/548/EEC. ►**M23** Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and preparations, the packaging of such substances and preparations must be marked legibly and indelibly as follows: 'Restricted to professional users'. ◄ By way of derogation, this provision shall not apply to: (a) medicinal or veterinary products as defined by Directive 65/65/EEC; (b) cosmetic products as defined by Directive 76/768/EEC; (c) ►**C2** — motor fuels which are covered by Council Directive 85/210/EEC ([11]), — mineral oil products intended for use as fuel in mobile or fixed combustion plants,

▼M20

— fuels sold in closed systems (e.g. liquid gas bottles); ◄

(d) artists' paints covered by Directive 88/379/EEC.

▼M28

32.	Substances and preparations containing one or more of the following substances: (a) creosote EINECS No 232-287-5 CAS No 8001-58-9 (b) creosote oil EINECS No 263-047-8 CAS No 61789-28-4 (c) distillates (coal tar), naphthalene oils EINECS No 283-484-8 CAS No 84650-04-4 (d) creosote oil, acenaphthene fraction EINECS No 292-605-3 CAS No 90640-84-9 (e) distillates (coal tar), upper EINECS No 266-026-1 CAS No 65996-91-0 (f) anthracene oil EINECS No 292-602-7 CAS No 90640-80-5 (g) tar acids, coal, crude EINECS No 266-019-3 CAS No 65996-85-2 (h) creosote, wood EINECS No 232-419-1 CAS No 8021-39-4 (i) low temperature tar oil, alkaline EINECS No 310-191-5 CAS No 122384-78-5	1.	May not be used in the treatment of wood. Furthermore, wood so treated may not be placed on the market
		2.	However by way of derogation:
			(i) Relating to the substances and preparations: these may be used for wood treatment in industrial installations or by professionals covered by Community legislation on the protection of workers for *in situ* retreatment only if they contain: (a) benzo-a-pyrene at a concentration of less than 0,005 % by mass (b) and water extractable phenols at a concentration of less than 3 % by mass. Such substances and preparations for use in wood treatment in industrial installations or by professionals: — may be placed on the market only in packaging of a capacity equal to or greater than 20 litres, — may not be sold to consumers. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of dangerous substances and preparations, the packaging of such substances and preparations shall be legibly and indelibly marked 'For use in industrial installations or professional treatment only'.
			(ii) Relating to wood treated in industrial installations or by professionals according to (i) which is placed on the market for the first time or retreated in-situ: this is permitted for professional and industrial use only, e.g. on railways, in electric power transmission and telecommunications, for fencing, for agricultural purposes (e.g. stakes for tree support) and in harbours and waterways.
			(iii) Relating to wood having been treated with substances listed in point 32(a) to (i) before this Directive applies: the prohibition in point 1 on the placing on the market shall not apply where this is placed on the second-hand market for re-use
		3.	However, treated wood referred to under point 2(ii) and (iii) may not be used: — inside buildings, whatever their purpose, — in toys, — in playgrounds, — in parks, gardens, and outdoor recreational and leisure facilities where there is a risk of frequent skin contact,

▼M28

		— in the manufacture of garden furniture such as picnic tables, — for the manufacture and use and any re-treatment of: — containers intended for growing purposes, — packaging that may may come into contact with raw materials, intermediate or finished products destined for human and/or animal consumption, — other materials which may contaminate the products mentioned above.

▼M19

33. 34. 35. 36. 37. 38. 39. 40.	Chloroform No CAS No 67-66-3 Carbon tetrachloride CAS No 56-23-5 1,1,2 Trichloroethane CAS No 79-00-5 1,1,2,2 Tetrachloroethane CAS No 79-34-5 1,1,1,2 Tetrachloroethane CAS No 630-20-6 Pentachloroethane CAS No 76-01-7 1,1 Dichloroethylene CAS No 75-35-4 1,1,1 Trichloroethane CAS No 71-55-6	May not be used in concentrations equal to or greater than 0,1 % by weight in substances and preparations placed on the market for sale to the general public and/or in diffusive applications such as in surface cleaning and cleaning of fabrics. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of dangerous substances and preparations, the packaging of such substances and preparations containing them in concentrations equal to or greater than 0,1 % shall be legible and indelibly marked as follows: 'For use in industrial installations only'. By way of derogation this provision shall not apply to: (a) medicinal or veterinary products as defined by Directive 65/65/EEC ([13]), as last amended by Directive 93/39/EEC ([14]); (b) cosmetic products as defined by Directive 76/768/EEC ([15]), as last amended by Directive 93/35/EEC ([16]).

▼M29

41.	Hexachloroethane CAS No 67-72-1 EINECS No 2006664	May not be used in the manufacturing or processing of non-ferrous metals.

▼M30

42.	Alkanes, C_{10}-C_{13}, chloro (short-chain chlorinated paraffins)	1. May not be placed on the market for use as substances or as constituents of other substances or preparations in concentrations higher than 1 %: — in metalworking; — for fat liquoring of leather. 2. Before 1 January 2003 all remaining uses of SCCPs will be reviewed by the European Commission, in cooperation with the Member States and the OSPAR Commission, in the light of any relevant new scientific data on risks posed by SCCPs to health and the environment. The European Parliament will be informed of the outcome of this review.

▼M34

43.	Azocolourants	1. ►M39 Azodyes which, by reductive cleavage of one or more azo groups, may release one or more of the aromatic amines listed in the Appendix, in detectable concentrations, i.e. above 30 ppm in the finished articles or in the dyed parts thereof,

▼M34

according to the testing methods listed in that Appendix, may not be used in textile and leather articles which may come into direct and prolonged contact with the human skin or oral cavity, such as:

— clothing, bedding, towels, hairpieces, wigs, hats, nappies and other sanitary items, sleeping bags,

— footwear, gloves, wristwatch straps, handbags, purses/wallets, briefcases, chair covers, purses worn round the neck,

— textile or leather toys and toys which include textile or leather garments,

— yarn and fabrics intended for use by the final consumer. ◄

2. Furthermore, the textile and leather Articles referred to in point 1 above may not be placed on the market unless they conform to the requirements set out in that point.

By way of derogation, until 1 January 2005, this provision shall not apply to textile articles made of recycled fibres if the amines are released by residues deriving from previous dyeing of the same fibres and if the listed amines are released in concentrations below 70 ppm.

3. Azodyes, which are contained in the 'List of azodyes' that is hereby added to the Appendix, may not be placed on the market or used for colouring textile and leather articles as a substance or constituent of preparations in concentrations higher than 0,1 % by mass.

4. Not later than 11 September 2005, the Commission shall, in the light of new scientific knowledge, review the provisions on azocolourants.

▼M35

44. ►C5 Diphenylether, pentabromo derivative $C_{12}H_5Br_5O$

1. May not be placed ◄ on the market or used as a substance or as a constituent of substances or of preparations in concentrations higher than 0,1 % by mass.

2. Articles may not be placed on the market if they, or flame-retarded parts thereof, contain this substance in concentrations higher than 0,1 % by mass.

►M41 3. By way of derogation, until 31 March 2006 paragraphs 1 and 2 shall not apply to aircraft emergency evacuation systems. ◄

45. ►C5 Diphenylether, octabromo derivative $C_{12}H_2Br_8O$

1. May not be placed ◄ on the market or used as a substance or as a constituent of substances or of preparations in concentrations higher than 0,1 % by mass.

2. Articles may not be placed on the market if they, or flame-retardant parts thereof, contain this substance in concentrations higher than 0,1 % by mass.

▼M38

46.

(1) Nonylphenol $C_6H_4(OH)C_9H_{19}$

(2) Nonylphenol ethoxylate $(C_2H_4O)_nC_{15}H_{24}O$

May not be placed on the market or used as a substance or constituent of preparations in concentrations equal or higher than 0,1 % by mass for the following purposes:

(1) industrial and institutional cleaning except:

— controlled closed dry cleaning systems where the washing liquid is recycled or incinerated,

▼M38

		— cleaning systems with special treatment where the washing liquid is recycled or incinerated; (2) domestic cleaning; (3) textiles and leather processing except: — processing with no release into waste water, — systems with special treatment where the process water is pre-treated to remove the organic fraction completely prior to biological waste water treatment (degreasing of sheepskin); (4) emulsifier in agricultural teat dips; (5) metal working except: — uses in controlled closed systems where the washing liquid is recycled or incinerated; (6) manufacturing of pulp and paper; (7) cosmetic products; (8) other personal care products except: — spermicides; (9) co-formulants in pesticides and biocides.
47.	Cement	(1) Cement and cement-containing preparations may not be used or placed on the market, if they contain, when hydrated, more than 0,0002 % soluble chromium VI of the total dry weight of the cement. (2) If reducing agents are used, then without prejudice to the application of other Community provisions on the classification, packaging and labelling of dangerous substances and preparations, the packaging of cement or cement-containing preparations shall be legibly and indelibly marked with information on the packing date, as well as on the storage conditions and the storage period appropriate to maintaining the activity of the reducing agent and to keeping the content of soluble chromium VI below the limit indicated in paragraph 1. (3) By way of derogation, paragraphs 1 and 2 shall not apply to the placing on the market for, and use in, controlled closed and totally automated processes in which cement and cement-containing preparations are handled solely by machines and in which there is no possibility of contact with the skin.

▼M42

48.	Toluene CAS No 108-88-3	May not be placed on the market or used as a substance or constituent of preparations in a concentration equal to or higher than 0,1 % by mass in adhesives and spray paints intended for sale to the general public.
49.	Trichlorobenzene CAS No 120-82-1	May not be placed on the market or used as a substance or constituent of preparations in a concentration equal to or higher than 0,1 % by mass for all uses except — as an intermediate of synthesis, or — as a process solvent in closed chemical applications for chlorination reactions, or — in the manufacture of 1,3,5 — trinitro — 2,4,6 — triaminobenzene (TATB).

▼M43

50.	Polycyclic-aromatic hydrocarbons (PAH)	
1.	Benzo(a)pyrene (BaP) CAS No 50-32-8	(1) Extender oils may not be placed on the market and used for the production of tyres or parts of tyres, if they contain: — more than 1 mg/kg BaP, or — more than 10 mg/kg of the sum of all listed PAHs. These limits are regarded as kept, if the polycyclic aromatics (PCA) extract is less than 3 % by mass, as measured by the Institute of Petroleum standard IP346: 1998 (Determination of PCA in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method), provided that compliance with the limit values of BaP and of the listed PAHs, as well as the correlation of the measured values with the PCA extract, is controlled by the manufacturer or importer every six months or after each major operational change, whichever is earlier.
2.	Benzo(e)pyren (BeP) CAS No 192-97-2	
3.	Benzo(a)anthracene (BaA) CAS No 56-55-3	
4.	Chrysen (CHR) CAS No 218-01-9	
5.	Benzo(b)fluoranthene (BbFA) CAS No 205-99-2	
6.	Benzo(j)fluoranthene (BjFA) CAS No 205-82-3	
7.	Benzo(k)fluoranthene (BkFA) CAS No 207-08-9	
8.	Dibenzo(a, h)anthracene (DBAhA) CAS No 53-70-3	(2) Furthermore, the tyres and treads for retreading manufactured after 1 January 2010 may not be placed on the market if they contain extender oils exceeding the limits indicated in paragraph 1. These limits are regarded as kept, if the vulcanised rubber compounds do not exceed the limit of 0,35 % Bay protons as measured and calculated by ISO 21461 (Rubber vulcanised — Determination of aromaticity of oil in vulcanised rubber compounds). (3) By way of derogation, paragraph 2 shall not apply to retreaded tyres if their tread does not contain extender oils exceeding the limits indicated in paragraph 1.

▼M44

►C6 51. ◄	The following phthalates (or other CAS- and EINECS numbers covering the substance) bis (2-ethylhexyl) phthalate (DEHP) CAS No 117-81-7 Einecs No 204-211-0 dibutyl phthalate (DBP) CAS No 84-74-2 Einecs No 201-557-4 benzyl butyl phthalate (BBP) CAS No 85-68-7 Einecs No 201-622-7	Shall not be used as substances or as constituents of preparations, at concentrations of greater than 0,1 % by mass of the plasticised material, in toys and childcare articles. Such toys and childcare articles containing these phthalates in a concentration greater than the limit mentioned above shall not be placed on the market.
►C6 51a. ◄	The following phthalates (or other CAS- and EINECS numbers covering the substance) di-'isononyl' phthalate (DINP) CAS No 28553-12-0 and 68515-48-0 Einecs No 249-079-5 and 271-090-9 di-'isodecyl' phthalate (DIDP) CAS No 26761-40-0 and 68515-49-1 Einecs No 247-977-1 and 271-091-4 di-n-octyl phthalate (DNOP) CAS No 117-84-0 Einecs No 204-214-7	Shall not be used as substances or as constituents of preparations, at concentrations of greater than 0,1 % by mass of the plasticised material, in toys and childcare articles which can be placed in the mouth by children. Such toys and childcare articles containing these phthalates in a concentration greater than the limit mentioned above shall not be placed on the market.

▼**M46**

52.	(1)	May not be placed on the market or used as a substance or constituent of preparations in a concentration equal to or higher than 0,005 % by mass.
Perfluorooctane sulfonates (PFOS) $C_8F_{17}SO_2X$ (X = OH, Metal salt (O-M+), halide, amide, and other derivatives including polymers)	(2)	May not be placed on the market in semi-finished products or articles, or parts thereof, if the concentration of PFOS is equal to or higher than 0,1 % by mass calculated with reference to the mass of structurally or microstructurally distinct parts that contain PFOS or, for textiles or other coated materials, if the amount of PFOS is equal to or higher than 1 $\mu g/m^2$ of the coated material.
	(3)	By way of derogation, paragraphs 1 and 2 shall not apply to the following items, nor to substances and preparations needed to produce them: (a) photoresists or anti reflective coatings for photolithography processes, (b) photographic coatings applied to films, papers, or printing plates, (c) mist suppressants for non-decorative hard chromium (VI) plating and wetting agents for use in controlled electroplating systems where the amount of PFOS released into the environment is minimised, by fully applying relevant best available techniques developed within the framework of Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control ([18]), (d) hydraulic fluids for aviation.
	(4)	By way of derogation from paragraph 1, fire-fighting foams that have been placed on the market before 27 December 2006 can be used until 27 June 2011.
	(5)	Paragraphs 1 and 2 shall apply without prejudice to Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents ([19]).
	(6)	Not later than 27 December 2008 Member States shall establish and communicate to the Commission an inventory that covers: (a) processes that are subject to derogation in paragraph 3(c) and the amounts of PFOS used in and released from them, (b) existing stocks of fire-fighting foams containing PFOS.
	(7)	As soon as new information on details of uses and safer alternative substances or technologies for the uses becomes available, the Commission shall review each of the derogations in paragraph 3(a) to (d) so that: (a) the uses of PFOS will be phased out as soon as the use of safer alternatives is technically and economically feasible, (b) a derogation can only be continued for essential uses for which safer alternatives do not exist and where the efforts undertaken to find safer alternatives have been reported on, (c) releases of PFOS into the environment have been minimised, by applying best available techniques.
	(8)	The Commission shall keep under review the ongoing risk assessment activities and the availability of safer alternative substances or tech-

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nologies related to the uses of perfluorooctanoic acid (PFOA) and related substances and propose all necessary measures to reduce identified risks, including restrictions on marketing and use, in particular when safer alternative substances or technologies, that are technically and economically feasible, are available.

▼B

►M22 (1) OJ 196, 16. 8. 1967, p. 1.
(2) OJ L 110, 4. 5. 1993, p. 20.
(3) OJ L 248, 30. 9. 1996, p. 1. ◄
(4) OJ No L 194, 25. 7. 1975, p 39.
(5) OJ No L 84, 31. 3. 1978, p. 43.
(6) Council Regulation (EEC) No 2658/87 of 23 July 1987 on the tariff and statistical nomenclature and on the Common Customs Tariff (OJ No L 256, 7. 9. 1987).
►M20 (7) OJ No 196, 16. 8. 1967, p. 1/67.
(8) OJ No L 187, 16. 7. 1988, p. 14.
(9) OJ No L 22, 9. 2. 1965, p. 369/65.
(10) OJ No L 262, 27. 9. 1976, p. 169.
(11) OJ No L 96, 3. 4. 1985, p. 25.
(12) OJ No 187, 16. 7. 1988, p. 14. ◄
►M19 (13) OJ No 22, 9. 2. 1965, p. 369/65.
(14) OJ No L 214, 24. 8. 1993, p. 22.
(15) OJ No L 262, 27. 9. 1976, p. 169.
(16) OJ No L 151, 23. 6. 1993, p. 32. ◄
►M24 (17) OJ L 377, 31.12.1991, p. 20. ◄
►M46 (18) OJ L 257, 10.10.1996, p. 26. Directive as last amended by Regulation (EC) No 166/2006 of the European Parliament and of the Council (OJ L 33, 4.2.2006, p. 1).
(19) OJ L 104, 8.4.2004, p. 1. Regulation as amended by Commission Regulation (EC) No 907/2006 (OJ L 168, 21.6.2006, p. 5). ◄

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Appendix

Foreword

Explanations of column headings

Substances:

The name is the same as that used for the substance in Annex I to Directive 67/548/EEC. Whenever possible dangerous substances are designated by their Einecs (European Inventory of Existing Commercial Chemical Substances) of Elincs (European List of Notified Chemical Substances) names. Other entries not listed in Einecs or Elincs are designated using an internationally recognized chemical name (e.g. ISO, IUPAC). An additional common name is included in some cases.

Index number:

The index number is the identification code given to the substance in Annex I of Directive 67/548/EEC. Substances are listed in the Appendix according to this index number.

EC number:

For each substance listed in the European Inventory of Existing Commercial Chemical Substances (Einecs) there is an identification code. The code starts at 200-001-8.

For each new substance notified under the Directive 67/548/EEC an identification code has been defined and published in the European List of Notified Chemical Substances (Elincs). The code starts at 400-010-9.

CAS number:

Chemical Abstracts Service (CAS) numbers have been defined for substances to help in their identification.

Notes:

The full text of the notes can be found in the foreword of Annex I of Directive 67/548/EEC.

The notes to the taken into account for the purposes of this Directive are as follows:

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Note A:

The name of the substance must appear on the label in the form of one of the designations given in Annex I to Directive 67/548/EEC (see Article 23(2)(a)).

In Annex I to Directive 67/548/EEC, use is sometimes made of a general description such as '… compounds' or '… salts'. In this case, the manufacturer or any other person who markets such a substance is required to state on the label the correct name, due account being taken of the chapter entitled 'Nomenclature' of the Foreword.

Directive 67/548/EEC also requires that the symbols, indications of danger, R- and S-phrases to be used for each substance shall be those shown in Annex I (Article 23(2)(c), (d) and (e)).

For substances belonging to one particular group of substances included in Annex I to Directive 67/548/EEC, the symbols, indications of danger, R- and S-phrases to be used for each substance shall be those shown in the appropriate entry in that Annex I.

For substances belonging to more than one group of substances included in Annex I to Directive 67/548/EEC, the symbols, indications of danger, R- and S-phrases to be used for each substance shall be those shown in both the appropriate entries given in Annex I. In cases where two different classifications are given in the two entries for the same hazard, the classification reflecting the more severe hazard classification is used.

Note D:

Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Annex I to Directive 67/548/EEC.

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However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the manufacturer or any person who places such a substance on the market must state on the label the name of the substance followed by the words'non-stabilised'.

Note E:

Substances with specific effects on human health (see Chapter 4 of Annex VI to Directive 67/548/EEC) that are classified as carcinogenic, mutagenic and/or toxic for reproduction in categories 1 or 2 are ascribed Note E if they are also classified as very toxic (T+), toxic (T) or harmful (Xn). For these substances, the risk phrases R20, R21, R22, R23, R24, R25, R26, R27, R28, R39, R68 (harmful), R48 and R65 and all combinations of these risk phrases shall be preceded by the word 'Also'.

Note H:

The classification and label shown for this substance applies to the dangerous property(ies) indicated by the risk phrase(s) in combination with the category(ies) of danger shown. The requirements of Article 6 of Directive 67/548/EEC on manufacturers, distributors, and importers of this substance apply to all other aspects of classification and labelling. The final label shall follow the requirements of Section 7 of Annex VI to Directive 67/548/EEC.

This note applies to certain coal- and oil-derived substances and to certain entries for groups of substances in Annex I to Directive 67/548/EEC.

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Note J:

The classification as a carcinogen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (Einecs No 200-753-7).

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Note K:

The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w 1,3-butadiene (Einecs No 203-450-8). If the substance is not classified as a carcinogen or mutagen, at least the S-phrases (2-)9-16 should apply. This note applies to certain complex oil-derived substances in Annex I to Directive 67/548/EEC.

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Note L:

The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346.

Note M:

The classification as a carcinogen need not apply if it can be shown that the substance contains less than 0,005 % w/w benzo[a]-pyrene (Einecs No 200-028-5).

Note N:

The classification as a carcinogen need not apply if the full refining history is known and it can be shown that the substance from which it is produced is not a carcinogen.

Note P:

The classification as a carcinogen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (Einecs No 200-753-7).

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Note R:

The classification as a carcinogen need not apply to fibres with a length weighted geometric mean diameter, less two standard errors, greater than 6μm.

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Note S:

This substance may not require a label according to Article 23 of Directive 67/548/EEC (see Section 8 of Annex VI).

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Point 29 — Carcinogens: category 1

Substances	Index number	EC number	CAS number	Notes
▼M45				
Chromium (VI) trioxide	024-001-00-0	215-607-8	1333-82-0	E
▼M23				
Zinc chromates including zinc potassium chromate	024-007-00-3			
nickel monoxide	028-003-00-2	215-215-7	1313-99-1	
nickel dioxide	028-004-00-8	234-823-3	12035-36-8	
dinickel trioxide	028-005-00-3	215-217-8	1314-06-3	
nickel sulphide	028-006-00-9	240-841-2	16812-54-7	
nickel subsulphide	028-007-00-4	234-829-6	12035-72-2	
diarsenic trioxide; arsenic trioxide	033-003-00-0	215-481-4	1327-53-3	
arsenic pentoxide; arsenic oxide	033-004-00-6	215-116-9	1303-28-2	
arsenic acid and its salts	033-005-00-1			
lead hydrogen arsenate	082-011-00-0	232-064-2	7784-40-9	
▼M37				
Butane [containing ≥0,1 % Butadiene (203-450-8)] [1]	601-004-01-8	203-448-7 [1]	106-97-8 [1]	C, S
Isobutane [containing ≥0,1 % Butadiene (203-450-8)] [2]		200-857-2 [2]	75-28-5 [2]	
1,3-Butadiene; buta-1,3-diene	601-013-00-X	203-450-8	106-99-0	D
▼M45				
Benzene	601-020-00-8	200-753-7	71-43-2	E
Triethyl arsenate	601-067-00-4	427-700-2	15606-95-8	
▼M23				
vinyl chloride; chloroethylene	602-023-00-7	200-831-0	75-01-4	
Bis (chloromethyl) ether	603-046-00-5	208-832-8	542-88-1	
Chloromethyl methyl ether; chlorodimethyl ether	603-075-00-3	203-480-1	107-30-2	
▼M45				
2-naphthylamine; beta-naphthylamine	612-022-00-3	202-080-4	91-59-8	E

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Substances	Index number	EC number	CAS number	Notes
Benzidine; 4,4′-diaminobiphenyl; biphenyl-4,4′-ylenediamine; 1,1′-biphenyl-4,4′-diamine	612-042-00-2	202-199-1	92-87-5	E

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salts of benzidine	612-070-00-5			
salts of 2-naphthylamine	612-071-00-0			
biphenyl-4-ylamine; xenylamine; 4-aminobiphenyl	612-072-00-6	202-177-1	92-67-1	
salts of biphenyl-4-ylamine; salts of xenylamine; salts of 4-aminobiphenyl	612-073-00-1			
Tar, coal; Coal tar (The by-product from the destructive distillation of coal. Almost black semisolid. A complex combination of aromatic hydro-carbons, phenolic compounds, nitrogen bases and thiophene.)	648-081-00-7	232-361-7	8007-45-2	
Tar, coal, high-temp.; Coal tar (The condensation product obtained by cooling, to approximately ambient temperature, the gas evolved in the high temperature (greater than 700 ºC (1292 ºF)) destructive distillation of coal. A black viscous liquid denser than water. Composed primarily of a complex mixture of condensed ring aromatic hydrocarbons. May contain minor amounts of phenolic compounds and aromatic nitrogen bases.)	648-082-00-2	266-024-0	65996-89-6	
Tar, coal, low-temp.; Coal oil (The condensation product obtained by cooling, to approximately ambient temperature, the gas evolved in low temperature (less than 700 ºC (1292 ºF)) destructive distillation of coal. A black viscous liquid denser than water. Composed primarily of condensed ring aromatic hydrocarbons, phenolic compounds, aromatic nitrogen bases, and their alkyl derivatives.)	648-083-00-8	266-025-6	65996-90-9	
Tar brown-coal; (An oil distilled from brown-coal tar. Composed primarily of aliphatic, naphthenic and one- to three-ring aromatic hydrocarbons, their alkyl derivates, heteroaromatics and one- and two-ring phenols	648-145-00-4	309-885-0	101316-83-0	

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Substances	Index number	EC number	CAS number	Notes
boiling in the range of approximately 150 °C to 360 °C (302 °F to 680 °F).)				
Tar, brown-coal, low temp.; (A tar obtained from low temperature carbonization and low temperature gasification of brown coal. Composed primarily of aliphatic, naphthenic and cyclic aromatic hydrocarbons, heteroaromatic hydrocarbons and cyclic phenols.)	648-146-00-X	309-886-6	101316-84-1	
▼M25 —————				
▼M23 Distillates (petroleum), light paraffinic; Unrefined or mildly refined baseoil (A complex combination of hydrocarbons produced by vacuum distillation of the residuum from atmospheric distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30} and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19 cS at 40 °C). It contains a relatively large proportion of saturated aliphatic hydrocarbons normally present in this distillation range of crude oil.)	649-050-00-0	265-051-5	64741-50-0	
Distillates (petroleum), heavy paraffinic; Unrefined or mildly refined baseoil (A complex combination of hydrocarbons produced by vacuum distillation of the residuum from atmospheric distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50}, and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19 cSt at 40 °C). It contains a relatively large proportion of saturated aliphatic hydrocarbons.)	649-051-00-6	265-052-0	64741-51-1	
Distillates (petroleum), light naphthenic; Unrefined or mildly refined baseoil (A complex combination of hydrocarbons produced by vacuum distillation of the residuum from atmospheric distillation of crude oil. It	649-052-00-1	265-053-6	64741-52-2	

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Substances	Index number	EC number	CAS number	Notes
consists of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30}, and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins.)				
Distillates (petroleum), heavy naphthenic; Unrefined or mildly refined baseoil (A complex combination of hydrocarbons produced by vacuum distillation of the residuum from atmospheric distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50}, and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins.)	649-053-00-7	265-054-1	64741-53-3	
Distillates (petroleum), acid-treated heavy naphthenic; Unrefined or mildly refined baseoil (A complex combination of hydrocarbons obtained as a raffinate from a sulfuric acid treating process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50}, and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins.)	649-054-00-2	265-117-3	64742-18-3	
Distillates (petroleum), acid-treated light naphthenic; Unrefined or mildly refined baseoil (A complex combination of hydrocarbons obtained as a raffinate from a sulfuric acid treating process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30}, and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins.)	649-055-00-8	265-118-9	64742-19-4	
Distillates (petroleum), acid-treated heavy paraffinic; Unrefined or mildly refined baseoil (A complex combination of hydrocarbons obtained as a raffinate from a sulfuric acid	649-056-00-3	265-119-4	64742-20-7	

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Substances	Index number	EC number	CAS number	Notes
process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50}, and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19 cSt at 40 °C).)				
Distillates (petroleum), acid-treated light paraffinic; Unrefined or mildly refined baseoil (A complex combination of hydrocarbons obtained as a raffinate from a sulfuric acid treating process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30} and produces a finished oil having a viscosity of less than 100 SUS at 100 °F (19 cSt at 40 °C).)	649-057-00-9	265-121-5	64742-21-8	
Distillates (petroleum), chemically neutralized heavy paraffinic; Unrefined or mildly refined baseoil (A complex combination of hydrocarbons obtained from a treating process to remove acidic materials. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50}, and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19 cSt at 40 °C). It contains a relatively large proportion of aliphatic hydrocarbons.)	649-058-00-4	265-127-8	64742-27-4	
Distillates (petroleum), chemically neutralized light paraffinic; Unrefined or mildly refined baseoil (A complex combination of hydrocarbons produced by a treating process to remove acidic materials. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30}, and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19 cSt at 40 °C).)	649-059-00-X	265-128-3	64742-28-5	
Distillates (petroleum), chemically neutralized heavy naphthenic; Unrefined or mildly refined baseoil (A complex combination of hydrocarbons produced by a treating process to remove acidic materials. It consists of	649-060-00-5	265-135-1	64742-34-3	

▼M23

Substances	Index number	EC number	CAS number	Notes
hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50}, and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins.)				
Distillates (petroleum), chemically neutralized light naphthenic; Unrefined or mildly refined baseoil (A complex combination of hydrocarbons produced by a treating process to remove acidic materials. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30}, and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins.)	649-061-00-0	265-136-7	64742-35-4	

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Gases (petroleum), catalytic cracked naphtha depropaniser overhead, C_3-rich acid-free; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation of catalytic cracked hydrocarbons and treated to remove acidic impurities. It consists of hydrocarbons having carbon numbers in the range of C_2 through C_4, predominantly C_3.)	649-062-00-6	270-755-0	68477-73-6	H, K
Gases (petroleum), catalytic cracker; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of the products from a catalytic cracking process. It consists predominantly of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-063-00-1	270-756-6	68477-74-7	H, K
Gases (petroleum), catalytic cracker, C_{1-5}-rich; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of products from a catalytic cracking process. It consists of aliphatic hydrocarbons having carbon numbers in the range of C_1 through C_6, predominantly C_1 through C_5.)	649-064-00-7	270-757-1	68477-75-8	H, K

▼M45

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), catalytic polymerised naphtha stabiliser overhead, C_{2-4}-rich; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation stabilisation of catalytic polymerised naphtha. It consists of aliphatic hydrocarbons having carbon numbers in the range of C_2 through C_6, predominantly C_2 through C_4.)	649-065-00-2	270-758-7	68477-76-9	H, K
Gases (petroleum), catalytic reformer, C_{1-4}-rich; Petroleum gas (A complex combination of hydrocarbons produced by distillation of products from a catalytic reforming process. It consists of hydrocarbons having carbon numbers in the range of C_1 through C_6, predominantly C_1 through C_4.)	649-066-00-8	270-760-8	68477-79-2	H, K
Gases (petroleum), C_{3-5} olefinic-paraffinic alkylation feed; Petroleum gas (A complex combination of olefinic and paraffinic hydrocarbons having carbon numbers in the range of C_3 through C_5 which are used as alkylation feed. Ambient temperatures normally exceed the critical temperature of these combinations.)	649-067-00-3	270-765-5	68477-83-8	H, K
Gases (petroleum), C_4-rich; Petroleum gas (A complex combination of hydrocarbons produced by distillation of products from a catalytic fractionation process. It consists of aliphatic hydrocarbons having carbon numbers in the range of C_3 through C_5, predominantly C_4.)	649-068-00-9	270-767-6	68477-85-0	H, K
Gases (petroleum), deethaniser overheads; Petroleum gas (A complex combination of hydrocarbons produced from distillation of the gas and gasoline fractions from the catalytic cracking process. It contains predominantly ethane and ethylene.)	649-069-00-4	270-768-1	68477-86-1	H, K
Gases (petroleum), deisobutaniser tower overheads; Petroleum gas (A complex combination of hydrocarbons produced by the atmospheric distillation of a butane-butylene stream. It	649-070-00-X	270-769-7	68477-87-2	H, K

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Substances	Index number	EC number	CAS number	Notes
consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_3 through C_4.)				
Gases (petroleum), depropaniser dry, propene-rich; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of products from the gas and gasoline fractions of a catalytic cracking process. It consists predominantly of propylene with some ethane and propane.)	649-071-00-5	270-772-3	68477-90-7	H, K
Gases (petroleum), depropaniser overheads; Petroleum gas (A complex combination of hydrocarbons produced by distillation of products from the gas and gasoline fractions of a catalytic cracking process. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_2 through C_4.)	649-072-00-0	270-773-9	68477-91-8	H, K
Gases (petroleum), gas recovery plant depropaniser overheads; Petroleum gas (A complex combination of hydrocarbons obtained by fractionation of miscellaneous hydrocarbon streams. It consists predominantly of hydrocarbons having carbon numbers in the range of C_1 through C_4, predominantly propane.)	649-073-00-6	270-777-0	68477-94-1	H, K
Gases (petroleum), Girbatol unit feed; Petroleum gas (A complex combination of hydrocarbons that is used as the feed into the Girbatol unit to remove hydrogen sulfide. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_2 through C_4.)	649-074-00-1	270-778-6	68477-95-2	H, K
Gases (petroleum), isomerised naphtha fractionator, C_4-rich, hydrogen sulfide-free; Petroleum gas	649-075-00-7	270-782-8	68477-99-6	H, K
Tail gas (petroleum), catalytic cracked clarified oil and thermal cracked vacuum residue fractionation reflux drum; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation of catalytic cracked clarified oil and thermal cracked vacuum residue. It consists predomi-	649-076-00-2	270-802-5	68478-21-7	H, K

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Substances	Index number	EC number	CAS number	Notes
nantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)				
Tail gas (petroleum), catalytic cracked naphtha stabilisation absorber; Petroleum gas (A complex combination of hydrocarbons obtained from the stabilisation of catalytic cracked naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-077-00-8	270-803-0	68478-22-8	H, K
Tail gas (petroleum), catalytic cracker, catalytic reformer and hydrodesulfuriser combined fractionater; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation of products from catalytic cracking, catalytic reforming and hydrodesulfurising processes treated to remove acidic impurities. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-078-00-3	270-804-6	68478-24-0	H, K
Tail gas (petroleum), catalytic reformed naphtha fractionation stabiliser; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation stabilisation of catalytic reformed naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-079-00-9	270-806-7	68478-26-2	H, K
Tail gas (petroleum), saturate gas plant mixed stream, C_4-rich; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation stabilisation of straight-run naphtha, distillation tail gas and catalytic reformed naphtha stabiliser tail gas. It consists of hydrocarbons having carbon numbers in the range of C_3 through C_6, predominantly butane and isobutane.)	649-080-00-4	270-813-5	68478-32-0	H, K
Tail gas (petroleum), saturate gas recovery plant, C_{1-2}-rich; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation of distillate tail gas, straight-run naphtha, catalytic reformed naphtha stabiliser tail gas. It consists predominantly of hydrocarbons	649-081-00-X	270-814-0	68478-33-1	H, K

▼M45

Substances	Index number	EC number	CAS number	Notes
having carbon numbers in the range of C_1 through C_5, predominantly methane and ethane.)				
Tail gas (petroleum), vacuum residues thermal cracker; Petroleum gas (A complex combination of hydrocarbons obtained from the thermal cracking of vacuum residues. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-082-00-5	270-815-6	68478-34-2	H, K
Hydrocarbons, C_{3-4}-rich, petroleum distillate; Petroleum gas (A complex combination of hydrocarbons produced by distillation and condensation of crude oil. It consists of hydrocarbons having carbon numbers in the range of C_3 through C_5, predominantly C_3 through C_4.)	649-083-00-0	270-990-9	68512-91-4	H, K
Gases (petroleum), full-range straight-run naphtha dehexaniser off; Petroleum gas (A complex combination of hydrocarbons obtained by the fractionation of the full-range straight-run naphtha. It consists of hydrocarbons having carbon numbers predominantly in the range of C_2 through C_6.)	649-084-00-6	271-000-8	68513-15-5	H, K
Gases (petroleum), hydrocracking depropaniser off, hydrocarbon-rich; Petroleum gas (A complex combination of hydrocarbon produced by the distillation of products from a hydrocracking process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4. It may also contain small amounts of hydrogen and hydrogen sulfide.)	649-085-00-1	271-001-3	68513-16-6	H, K
Gases (petroleum), light straight-run naphtha stabiliser off; Petroleum gas (A complex combination of hydrocarbons obtained by the stabilisation of light straight-run naphtha. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_2 through C_6.)	649-086-00-7	271-002-9	68513-17-7	H, K

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Substances	Index number	EC number	CAS number	Notes
Residues (petroleum), alkylation splitter, C_4-rich; Petroleum gas (A complex residuum from the distillation of streams from various refinery operations. It consists of hydrocarbons having carbon numbers in the range of C_4 through C_5, predominantly butane, and boiling in the range of approximately –11,7 °C to 27,8 °C.)	649-087-00-2	271-010-2	68513-66-6	H, K
Hydrocarbons, C_{1-4}; Petroleum gas (A complex combination of hydrocarbons provided by thermal cracking and absorber operations and by distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4 and boiling in the range of approximately –164 °C to –0,5 °C.)	649-088-00-8	271-032-2	68514-31-8	H, K
Hydrocarbons, C_{1-4}, sweetened; Petroleum gas (A complex combination of hydrocarbons obtained by subjecting hydrocarbon gases to a sweetening process to convert mercaptans or to remove acidic impurities. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4 and boiling in the range of approximately –164 °C to –0,5 °C.)	649-089-00-3	271-038-5	68514-36-3	H, K
Hydrocarbons, C_{1-3}; Petroleum gas (A complex combination of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_3 and boiling in the range of approximately –164 °C to –42 °C.)	649-090-00-9	271-259-7	68527-16-2	H, K
Hydrocarbons, C_{1-4}, debutaniser fraction; Petroleum gas	649-091-00-4	271-261-8	68527-19-5	H, K
Gases (petroleum), C_{1-5}, wet; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of crude oil and/or the cracking of tower gas oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-092-00-X	271-624-0	68602-83-5	H, K
Hydrocarbons, C_{2-4}; Petroleum gas	649-093-00-5	271-734-9	68606-25-7	H, K

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Substances	Index number	EC number	CAS number	Notes
Hydrocarbons, C_3; Petroleum gas	649-094-00-0	271-735-4	68606-26-8	H, K
Gases (petroleum), alkylation feed; Petroleum gas (A complex combination of hydrocarbons produced by the catalytic cracking of gas oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_3 through C_4.)	649-095-00-6	271-737-5	68606-27-9	H, K
Gases (petroleum), depropaniser bottoms fractionation off; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation of depropaniser bottoms. It consists predominantly of butane, isobutane and butadiene.)	649-096-00-1	271-742-2	68606-34-8	H, K
Gases (petroleum), refinery blend; Petroleum gas (A complex combination obtained from various processes. It consists of hydrogen, hydrogen sulfide and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-097-00-7	272-183-7	68783-07-3	H, K
Gases (petroleum), catalytic cracking; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of the products from a catalytic cracking process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_3 through C_5.)	649-098-00-2	272-203-4	68783-64-2	H, K
Gases (petroleum), C_{2-4}, sweetened; Petroleum gas (A complex combination of hydrocarbons obtained by subjecting a petroleum distillate to a sweetening process to convert mercaptans or to remove acidic impurities. It consists predominantly of saturated and unsaturated hydrocarbons having carbon numbers predominantly in the range of C_2 through C_4 and boiling in the range of approximately –51 °C to –34 °C.)	649-099-00-8	272-205-5	68783-65-3	H, K
Gases (petroleum), crude oil fractionation off; Petroleum gas (A complex combination of hydrocarbons produced by the fractionation of crude oil. It consists of saturated aliphatic hydrocarbons having carbon	649-100-00-1	272-871-7	68918-99-0	H, K

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Substances	Index number	EC number	CAS number	Notes
numbers predominantly in the range of C_1 through C_5.)				
Gases (petroleum), dehexaniser off; Petroleum gas (A complex combination of hydrocarbons obtained by the fractionation of combined naphtha streams. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-101-00-7	272-872-2	68919-00-6	H, K
Gases (petroleum), light straight run gasoline fractionation stabiliser off; Petroleum gas (A complex combination of hydrocarbons obtained by the fractionation of light straight-run gasoline. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-102-00-2	272-878-5	68919-05-1	H, K
Gases (petroleum), naphtha unifiner desulfurisation stripper off; Petroleum gas (A complex combination of hydrocarbons produced by a naphtha unifiner desulfurisation process and stripped from the naphtha product. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-103-00-8	272-879-0	68919-06-2	H, K
Gases (petroleum), straight-run naphtha catalytic reforming off; Petroleum gas (A complex combination of hydrocarbons obtained by the catalytic reforming of straight-run naphtha and fractionation of the total effluent. It consists of methane, ethane, and propane.)	649-104-00-3	272-882-7	68919-09-5	H, K
Gases (petroleum), fluidised catalytic cracker splitter overheads; Petroleum gas (A complex combination of hydrocarbons produced by the fractionation of the charge to the C_3-C_4 splitter. It consists predominantly of C_3 hydrocarbons.)	649-105-00-9	272-893-7	68919-20-0	H, K
Gases (petroleum), straight-run stabiliser off; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation of the liquid from the first tower used in the distil-	649-106-00-4	272-883-2	68919-10-8	H, K

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Substances	Index number	EC number	CAS number	Notes
lation of crude oil. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)				
Gases (petroleum), catalytic cracked naphtha debutaniser; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation of catalytic cracked naphtha. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-107-00-X	273-169-3	68952-76-1	H, K
Tail gas (petroleum), catalytic cracked distillate and naphtha stabiliser; Petroleum gas (A complex combination of hydrocarbons obtained by the fractionation of catalytic cracked naphtha and distillate. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-108-00-5	273-170-9	68952-77-2	H, K
Tail gas (petroleum), thermal-cracked distillate, gas oil and naphtha absorber; Petroleum gas (A complex combination of hydrocarbons obtained from the separation of thermal-cracked distillates, naphtha and gas oil. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-109-00-0	273-175-6	68952-81-8	H, K
Tail gas (petroleum), thermal cracked hydrocarbon fractionation stabiliser, petroleum coking; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation stabilisation of thermal cracked hydrocarbons from a petroleum coking process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-110-00-6	273-176-1	68952-82-9	H, K
Gases (petroleum), light steam-cracked, butadiene concentration; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of products from a thermal cracking process. It consists of hydrocarbons having a carbon number predominantly of C_4.)	649-111-00-1	273-265-5	68955-28-2	H, K

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Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), straight-run naphtha catalytic reformer stabiliser overhead; Petroleum gas (A complex combination of hydrocarbons obtained by the catalytic reforming of straight-run naphtha and the fractionation of the total effluent. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_2 through C_4.)	649-112-00-7	273-270-2	68955-34-0	H, K
Hydrocarbons, C_4; Petroleum gas	649-113-00-2	289-339-5	87741-01-3	H, K
Alkanes, C_{1-4}, C_3-rich; Petroleum gas	649-114-00-8	292-456-4	90622-55-2	H, K
Gases (petroleum), steam-cracker C_3-rich; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of products from a steam cracking process. It consists predominantly of propylene with some propane and boils in the range of approximately –70 °C to 0 °C.)	649-115-00-3	295-404-9	92045-22-2	H, K
Hydrocarbons, C_4, steam-cracker distillate; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of the products of a steam cracking process. It consists predominantly of hydrocarbons having a carbon number of C_4, predominantly 1-butene and 2-butene, containing also butane and isobutene and boiling in the range of approximately –12 °C to 5 °C.)	649-116-00-9	295-405-4	92045-23-3	H, K
Petroleum gases, liquefied, sweetened, C_4 fraction; Petroleum gas (A complex combination of hydrocarbons obtained by subjecting a liquefied petroleum gas mix to a sweetening process to oxidise mercaptans or to remove acidic impurities. It consists predominantly of C_4 saturated and unsaturated hydrocarbons.)	649-117-00-4	295-463-0	92045-80-2	H, K, S
Raffinates (petroleum), steam-cracked C_4 fraction cuprous ammonium acetate extraction, C_{3-5} and C_{3-5} unsaturated, butadiene-free; Petroleum gas	649-119-00-5	307-769-4	97722-19-5	H, K

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Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), amine system feed; Refinery gas (The feed gas to the amine system for removal of hydrogen sulphide. It consists primarily of hydrogen. Carbon monoxide, carbon dioxide, hydrogen sulfide and aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5 may also be present.)	649-120-00-0	270-746-1	68477-65-6	H, K
Gases (petroleum), benzene unit hydrodesulphuriser off; Refinery gas (Off gases produced by the benzene unit. It consists primarily of hydrogen. Carbon monoxide and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6, including benzene, may also be present.)	649-121-00-6	270-747-7	68477-66-7	H, K
Gases (petroleum), benzene unit recycle, hydrogen-rich; Refinery gas (A complex combination of hydrocarbons obtained by recycling the gases of the benzene unit. It consists primarily of hydrogen with various small amounts of carbon monoxide and hydrocarbons having carbon numbers in the range of C_1 through C_6.)	649-122-00-1	270-748-2	68477-67-8	H, K
Gases (petroleum), blend oil, hydrogen-nitrogen-rich; Refinery gas (A complex combination of hydrocarbons obtained by distillation of a blend oil. It consists primarily of hydrogen and nitrogen with various small amounts of carbon monoxide, carbon dioxide, and aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-123-00-7	270-749-8	68477-68-9	H, K
Gases (petroleum), catalytic reformed naphtha stripper overheads; Refinery gas (A complex combination of hydrocarbons obtained from stabilisation of catalytic reformed naphtha. It consists of hydrogen and saturated hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-124-00-2	270-759-2	68477-77-0	H, K

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Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), C_{6-8} catalytic reformer recycle; Refinery gas (A complex combination of hydrocarbons produced by distillation of products from catalytic reforming of C_6-C_8 feed and recycled to conserve hydrogen. It consists primarily of hydrogen. It may also contain various small amounts of carbon monoxide, carbon dioxide, nitrogen, and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-125-00-8	270-761-3	68477-80-5	H, K
Gases (petroleum), C_{6-8} catalytic reformer; Refinery gas (A complex combination of hydrocarbons produced by distillation of products from catalytic reforming of C_6-C_8 feed. It consists of hydrocarbons having carbon numbers in the range of C_1 through C_5 and hydrogen.)	649-126-00-3	270-762-9	68477-81-6	H, K
Gases (petroleum), C_{6-8} catalytic reformer recycle, hydrogen-rich; Refinery gas	649-127-00-9	270-763-4	68477-82-7	H, K
Gases (petroleum), C_2-return stream; Refinery gas (A complex combination of hydrocarbons obtained by the extraction of hydrogen from a gas stream which consists primarily of hydrogen with small amounts of nitrogen, carbon monoxide, methane, ethane, and ethylene. It contains predominantly hydrocarbons such as methane, ethane, and ethylene with small amounts of hydrogen, nitrogen and carbon monoxide.)	649-128-00-4	270-766-0	68477-84-9	H, K
Gases (petroleum), dry sour, gas-concentration-unit-off; Refinery gas (The complex combination of dry gases from a gas concentration unit. It consists of hydrogen, hydrogen sulphide and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_3.)	649-129-00-X	270-774-4	68477-92-9	H, K
Gases (petroleum), gas concentration reabsorber distillation; Refinery gas (A complex combination of hydrocarbons produced by distillation of products from combined gas streams in a gas concentration reabsorber. It	649-130-00-5	270-776-5	68477-93-0	H, K

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Substances	Index number	EC number	CAS number	Notes
consists predominantly of hydrogen, carbon monoxide, carbon dioxide, nitrogen, hydrogen sulphide and hydrocarbons having carbon numbers in the range of C_1 through C_3.)				
Gases (petroleum), hydrogen absorber off; Refinery gas (A complex combination obtained by absorbing hydrogen from a hydrogen rich stream. It consists of hydrogen, carbon monoxide, nitrogen, and methane with small amounts of C_2 hydrocarbons.)	649-131-00-0	270-779-1	68477-96-3	H, K
Gases (petroleum), hydrogen-rich; Refinery gas (A complex combination separated as a gas from hydrocarbon gases by chilling. It consists primarily of hydrogen with various small amounts of carbon monoxide, nitrogen, methane, and C_2 hydrocarbons.)	649-132-00-6	270-780-7	68477-97-4	H, K
Gases (petroleum), hydrotreater blend oil recycle, hydrogen-nitrogen-rich; Refinery gas (A complex combination obtained from recycled hydrotreated blend oil. It consists primarily of hydrogen and nitrogen with various small amounts of carbon monoxide, carbon dioxide and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-133-00-1	270-781-2	68477-98-5	H, K
Gases (petroleum), recycle, hydrogen-rich; Refinery gas (A complex combination obtained from recycled reactor gases. It consists primarily of hydrogen with various small amounts of carbon monoxide, carbon dioxide, nitrogen, hydrogen sulphide, and saturated aliphatic hydrocarbons having carbon numbers in the range of C_1 through C_5.)	649-134-00-7	270-783-3	68478-00-2	H, K
Gases (petroleum), reformer make-up, hydrogen-rich; Refinery gas (A complex combination obtained from the reformers. It consists primarily of hydrogen with various small amounts of carbon monoxide and aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-135-00-2	270-784-9	68478-01-3	H, K

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Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), reforming hydrotreater; Refinery gas (A complex combination obtained from the reforming hydrotreating process. It consists primarily of hydrogen, methane, and ethane with various small amounts of hydrogen sulphide and aliphatic hydrocarbons having carbon numbers predominantly in the range C_3 through C_5.)	649-136-00-8	270-785-4	68478-02-4	H, K
Gases (petroleum), reforming hydrotreater, hydrogen-methane-rich; Refinery gas (A complex combination obtained from the reforming hydrotreating process. It consists primarily of hydrogen and methane with various small amounts of carbon monoxide, carbon dioxide, nitrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_2 through C_5.)	649-137-00-3	270-787-5	68478-03-5	H, K
Gases (petroleum), reforming hydrotreater make-up, hydrogen-rich; Refinery gas (A complex combination obtained from the reforming hydrotreating process. It consists primarily of hydrogen with various small amounts of carbon monoxide and aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-138-00-9	270-788-0	68478-04-6	H, K
Gases (petroleum), thermal cracking distillation; Refinery gas (A complex combination produced by distillation of products from a thermal cracking process. It consists of hydrogen, hydrogen sulphide, carbon monoxide, carbon dioxide and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-139-00-4	270-789-6	68478-05-7	H, K
Tail gas (petroleum), catalytic cracker refractionation absorber; Refinery gas (A complex combination of hydrocarbons obtained from refractionation of products from a catalytic cracking process. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_3.)	649-140-00-X	270-805-1	68478-25-1	H, K

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Substances	Index number	EC number	CAS number	Notes
Tail gas (petroleum), catalytic reformed naphtha separator; Refinery gas (A complex combination of hydrocarbons obtained from the catalytic reforming of straight-run naphtha. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-141-00-5	270-807-2	68478-27-3	H, K
Tail gas (petroleum), catalytic reformed naphtha stabiliser; Refinery gas (A complex combination of hydrocarbons obtained from the stabilisation of catalytic reformed naphtha. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-142-00-0	270-808-8	68478-28-4	H, K
Tail gas (petroleum), cracked distillate hydrotreater separator; Refinery gas (A complex combination of hydrocarbons obtained by treating cracked distillates with hydrogen in the presence of a catalyst. It consists of hydrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-143-00-6	270-809-3	68478-29-5	H, K
Tail gas (petroleum), hydrodesulphurised straight-run naphtha separator; Refinery gas (A complex combination of hydrocarbons obtained from hydrodesulphurisation of straight-run naphtha. It consists of hydrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-144-00-1	270-810-9	68478-30-8	H, K
Gases (petroleum), catalytic reformed straight-run naphtha stabiliser overheads; Refinery gas (A complex combination of hydrocarbons obtained from the catalytic reforming of straight-run naphtha followed by fractionation of the total effluent. It consists of hydrogen, methane, ethane and propane.)	649-145-00-7	270-999-8	68513-14-4	H, K
Gases (petroleum), reformer effluent high-pressure flash drum off; Refinery gas (A complex combination produced by the high-pressure	649-146-00-2	271-003-4	68513-18-8	H, K

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Substances	Index number	EC number	CAS number	Notes
flashing of the effluent from the reforming reactor. It consists primarily of hydrogen with various small amounts of methane, ethane, and propane.)				
Gases (petroleum), reformer effluent low-pressure flash drum off; Refinery gas (A complex combination produced by low-pressure flashing of the effluent from the reforming reactor. It consists primarily of hydrogen with various small amounts of methane, ethane, and propane.)	649-147-00-8	271-005-5	68513-19-9	H, K
Gases (petroleum), oil refinery gas distillation off; Refinery gas (A complex combination separated by distillation of a gas stream containing hydrogen, carbon monoxide, carbon dioxide and hydrocarbons having carbon numbers in the range of C_1 through C_6 or obtained by cracking ethane and propane. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_2, hydrogen, nitrogen, and carbon monoxide.)	649-148-00-3	271-258-1	68527-15-1	H, K
Gases (petroleum), benzene unit hydrotreater depentaniser overheads; Refinery gas (A complex combination produced by treating the feed from the benzene unit with hydrogen in the presence of a catalyst followed by depentanising. It consists primarily of hydrogen, ethane and propane with various small amounts of nitrogen, carbon monoxide, carbon dioxide and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6. It may contain trace amounts of benzene.)	649-149-00-9	271-623-5	68602-82-4	H, K
Gases (petroleum), secondary absorber off, fluidised catalytic cracker overheads fractionator; Refinery gas (A complex combination produced by the fractionation of the overhead products from the catalytic cracking process in the fluidised catalytic cracker. It consists of hydrogen, nitrogen, and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_3.)	649-150-00-4	271-625-6	68602-84-6	H, K

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Substances	Index number	EC number	CAS number	Notes
Petroleum products, refinery gases; Refinery gas (A complex combination which consists primarily of hydrogen with various small amounts of methane, ethane and propane.)	649-151-00-X	271-750-6	68607-11-4	H, K
Gases (petroleum), hydrocracking low-pressure separator; Refinery gas (A complex combination obtained by the liquid-vapour separation of the hydrocracking process reactor effluent. It consists predominantly of hydrogen and saturated hydrocarbons having carbon numbers predominantly in the range of C_1 through C_3.)	649-152-00-5	272-182-1	68783-06-2	H, K
Gases (petroleum), refinery; Refinery gas (A complex combination obtained from various petroleum refining operations. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_3.)	649-153-00-0	272-338-9	68814-67-5	H, K
Gases (petroleum), platformer products separator off; Refinery gas (A complex combination obtained from the chemical reforming of naphthenes to aromatics. It consists of hydrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_2 through C_4.)	649-154-00-6	272-343-6	68814-90-4	H, K
Gases (petroleum), hydrotreated sour kerosine depentaniser stabiliser off; Refinery gas (The complex combination obtained from the dependentaniser stabilisation of hydrotreated kerosine. It consists primarily of hydrogen, methane, ethane, and propane with various small amounts of nitrogen, hydrogen sulphide, carbon monoxide and hydrocarbons having carbon numbers predominantly in the range of C_4 through C_5.)	649-155-00-1	272-775-5	68911-58-0	H, K
Gases (petroleum), hydrotreated sour kerosine flash drum; Refinery gas (A complex combination obtained from the flash drum of the unit treating sour kerosine with hydrogen in the presence of a catalyst. It consists primarily of hydrogen	649-156-00-7	272-776-0	68911-59-1	H, K

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Substances	Index number	EC number	CAS number	Notes
and methane with various small amounts of nitrogen, carbon monoxide, and hydrocarbons having carbon numbers predominantly in the range of C_2 through C_5.)				
Gases (petroleum), distillate unifiner desulphurisation stripper off; Refinery gas (A complex combination stripped from the liquid product of the unifiner desulphurisation process. It consists of hydrogen sulphide, methane, ethane, and propane.)	649-157-00-2	272-873-8	68919-01-7	H, K
Gases (petroleum), fluidised catalytic cracker fractionation off; Refinery gas (A complex combination produced by the fractionation of the overhead product of the fluidised catalytic cracking process. It consists of hydrogen, hydrogen sulphide, nitrogen, and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-158-00-8	272-874-3	68919-02-8	H, K
Gases (petroleum), fluidised catalytic cracker scrubbing secondary absorber off; Refinery gas (A complex combination produced by scrubbing the overhead gas from the fluidised catalytic cracker. It consists of hydrogen, nitrogen, methane, ethane and propane.)	649-159-00-3	272-875-9	68919-03-9	H, K
Gases (petroleum), heavy distillate hydrotreater desulphurisation stripper off; Refinery gas (A complex combination stripped from the liquid product of the heavy distillate hydrotreater desulphurisation process. It consists of hydrogen, hydrogen sulphide, and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-160-00-9	272-876-4	68919-04-0	H, K
Gases (petroleum), platformer stabiliser off, light ends fractionation; Refinery gas (A complex combination obtained by the fractionation of the light ends of the platinum reactors of the platformer unit. It consists of hydrogen, methane, ethane and propane.)	649-161-00-4	272-880-6	68919-07-3	H, K

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Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), preflash tower off, crude distillation; Refinery gas (A complex combination produced from the first tower used in the distillation of crude oil. It consists of nitrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-162-00-X	272-881-1	68919-08-4	H, K
Gases (petroleum), tar stripper off; Refinery gas (A complex combination obtained by the fractionation of reduced crude oil. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-163-00-5	272-884-8	68919-11-9	H, K
Gases (petroleum), unifiner stripper off; Refinery gas (A combination of hydrogen and methane obtained by fractionation of the products from the unifiner unit.)	649-164-00-0	272-885-3	68919-12-0	H, K
Tail gas (petroleum), catalytic hydrodesulphurised naphtha separator; Refinery gas (A complex combination of hydrocarbons obtained from the hydrodesulphurisation of naphtha. It consists of hydrogen, methane, ethane, and propane.)	649-165-00-6	273-173-5	68952-79-4	H, K
Tail gas (petroleum), straight-run naphtha hydrodesulphuriser; Refinery gas (A complex combination obtained from the hydrodesulphurisation of straight-run naphtha. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-166-00-1	273-174-0	68952-80-7	H, K
Gases (petroleum), sponge absorber off, fluidised catalytic cracker and gas oil desulphuriser overhead fractionation; Refinery gas (A complex combination obtained by the fractionation of products from the fluidised catalytic cracker and gas oil desulphuriser. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-167-00-7	273-269-7	68955-33-9	H, K

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Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), crude distillation and catalytic cracking; Refinery gas (A complex combination produced by crude distillation and catalytic cracking processes. It consists of hydrogen, hydrogen sulphide, nitrogen, carbon monoxide and paraffinic and olefinic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-168-00-2	273-563-5	68989-88-8	H, K
Gases (petroleum), gas oil diethanolamine scrubber off; Refinery gas (A complex combination produced by desulphurisation of gas oils with diethanolamine. It consists predominantly of hydrogen sulphide, hydrogen and aliphatic hydrocarbons having carbon numbers in the range of C_1 through C_5.)	649-169-00-8	295-397-2	92045-15-3	H, K
Gases (petroleum), gas oil hydrodesulphurisation effluent; Refinery gas (A complex combination obtained by separation of the liquid phase from the effluent from the hydrogenation reaction. It consists predominantly of hydrogen, hydrogen sulphide and aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_3.)	649-170-00-3	295-398-8	92045-16-4	H, K
Gases (petroleum), gas oil hydrodesulphurisation purge; Refinery gas (A complex combination of gases obtained from the reformer and from the purges from the hydrogenation reactor. It consists predominantly of hydrogen and aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-171-00-9	295-399-3	92045-17-5	H, K
Gases (petroleum), hydrogenator effluent flash drum off; Refinery gas (A complex combination of gases obtained from flash of the effluents after the hydrogenation reaction. It consists predominantly of hydrogen and aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-172-00-4	295-400-7	92045-18-6	H, K

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Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), naphtha steam cracking high-pressure residual; Refinery gas (A complex combination obtained as a mixture of the non-condensable portions from the product of a naphtha steam cracking process as well as residual gases obtained during the preparation of subsequent products. It consists predominantly of hydrogen and paraffinic and olefinic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5 with which natural gas may also be mixed.)	649-173-00-X	295-401-2	92045-19-7	H, K
Gases (petroleum), residue visbaking off; Refinery gas (A complex combination obtained from viscosity reduction of residues in a furnace. It consists predominantly of hydrogen sulphide and paraffinic and olefinic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-174-00-5	295-402-8	92045-20-0	H, K
Gases (petroleum), C_{3-4}; Petroleum gas (A complex combination of hydrocarbons produced by distillation of products from the cracking of crude oil. It consists of hydrocarbons having carbon numbers in the range of C_3 through C_4, predominantly of propane and propylene, and boiling in the range of approximately –51 °C to –1 °C.)	649-177-00-1	268-629-5	68131-75-9	H, K
Tail gas (petroleum), catalytic cracked distillate and catalytic cracked naphtha fractionation absorber; Petroleum gas (The complex combination of hydrocarbons from the distillation of the products from catalytic cracked distillates and catalytic cracked naphtha. It consists predominantly of hydrocarbons having carbon numbers in the range of C_1 through C_4.)	649-178-00-7	269-617-2	68307-98-2	H, K
Tail gas (petroleum), catalytic polymerisation naphtha fractionation stabiliser; Petroleum gas (A complex combination of hydrocarbons from the fractionation stabilisation products from polymerisation of naphtha. It consists predominantly of hydrocarbons having	649-179-00-2	269-618-8	68307-99-3	H, K

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Substances	Index number	EC number	CAS number	Notes
carbon numbers in the range of C_1 through C_4.)				
Tail gas (petroleum), catalytic reformed naphtha fractionation stabiliser, hydrogen sulphide-free; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation stabilisation of catalytic reformed naphtha and from which hydrogen sulphide has been removed by amine treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-180-00-8	269-619-3	68308-00-9	H, K
Tail gas (petroleum), cracked distillate hydrotreater stripper; Petroleum gas (A complex combination of hydrocarbons obtained by treating thermal cracked distillates with hydrogen in the presence of a catalyst. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-181-00-3	269-620-9	68308-01-0	H, K
Tail gas (petroleum), straight-run distillate hydrodesulphuriser, hydrogen sulphide-free; Petroleum gas (A complex combination of hydrocarbons obtained from catalytic hydrodesulphurisation of straight run distillates and from which hydrogen sulphide has been removed by amine treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-182-00-9	269-630-3	68308-10-1	H, K
Tail gas (petroleum), gas oil catalytic cracking absorber; Petroleum gas (A complex combination of hydrocarbons obtained from the distillation of products from the catalytic cracking of gas oil. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-183-00-4	269-623-5	68308-03-2	H, K
Tail gas (petroleum), gas recovery plant; Petroleum gas (A complex combination of hydrocarbons from the distillation of products from miscellaneous hydrocarbon streams. It consists predominantly of hydrocarbons having carbon	649-184-00-X	269-624-0	68308-04-3	H, K

▼M45

Substances	Index number	EC number	CAS number	Notes
numbers predominantly in the range of C_1 through C_5.)				
Tail gas (petroleum), gas recovery plant deethaniser; Petroleum gas (A complex combination of hydrocarbons from the distillation of products from miscellaneous hydrocarbon streams. It consists of hydrocarbon having carbon numbers predominantly in the range of C_1 through C_4.)	649-185-00-5	269-625-6	68308-05-4	H, K
Tail gas (petroleum), hydrodesulphurised distillate and hydrodesulphurised naphtha fractionator, acid-free; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation of hydrodesulphurised naphtha and distillate hydrocarbon streams and treated to remove acidic impurities. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-186-00-0	269-626-1	68308-06-5	H, K
Tail gas (petroleum), hydrodesulphurised vacuum gas oil stripper, hydrogen sulphide-free; Petroleum gas (A complex combination of hydrocarbons obtained from stripping stabilisation of catalytic hydrodesulphurised vacuum gas oil and from which hydrogen sulphide has been removed by amine treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-187-00-6	269-627-7	68308-07-6	H, K
Tail gas (petroleum), light straight-run naphtha stabiliser, hydrogen sulphide-free; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation stabilisation of light straight-run naphtha and from which hydrogen sulphide has been removed by amine treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-188-00-1	269-629-8	68308-09-8	H, K
Tail gas (petroleum), propane-propylene alkylation feed prep deethaniser; Petroleum gas (A complex combination of hydrocarbons obtained from the	649-189-00-7	269-631-9	68308-11-2	H, K

▼M45

Substances	Index number	EC number	CAS number	Notes
distillation of the reaction products of propane with propylene. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)				
Tail gas (petroleum), vacuum gas oil hydrodesulphuriser, hydrogen sulphide-free; Petroleum gas (A complex combination of hydrocarbons obtained from catalytic hydrodesulphurisation of vacuum gas oil and from which hydrogen sulphide has been removed by amine treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-190-00-2	269-632-4	68308-12-3	H, K
Gases (petroleum), catalytic cracked overheads; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of products from the catalytic cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_3 through C_5 and boiling in the range of approximately –48 °C to 32 °C.)	649-191-00-8	270-071-2	68409-99-4	H, K
Alkanes, C_{1-2}; Petroleum gas	649-193-00-9	270-651-5	68475-57-0	H, K
Alkanes, C_{2-3}; Petroleum gas	649-194-00-4	270-652-0	68475-58-1	H, K
Alkanes, C_{3-4}; Petroleum gas	649-195-00-X	270-653-6	68475-59-2	H, K
Alkanes, C_{4-5}; Petroleum gas	649-196-00-5	270-654-1	68475-60-5	H, K
Fuel gases; Petroleum gas (A combination of light gases. It consists predominantly of hydrogen and/or low molecular weight hydrocarbons.)	649-197-00-0	270-667-2	68476-26-6	H, K
Fuel gases, crude oil of distillates; Petroleum gas (A complex combination of light gases produced by distillation of crude oil and by catalytic reforming of naphtha. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4 and boiling in the range of approximately –217 °C to –12 °C.)	649-198-00-6	270-670-9	68476-29-9	H, K

▼M45

Substances	Index number	EC number	CAS number	Notes
Hydrocarbons, C_{3-4}; Petroleum gas	649-199-00-1	270-681-9	68476-40-4	H, K
Hydrocarbons, C_{4-5}; Petroleum gas	649-200-00-5	270-682-4	68476-42-6	H, K
Hydrocarbons, C_{2-4}, C_3-rich; Petroleum gas	649-201-00-0	270-689-2	68476-49-3	H, K
Petroleum gases, liquefied; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_3 through C_7 and boiling in the range of approximately –40 °C to 80 °C.)	649-202-00-6	270-704-2	68476-85-7	H, K, S
Petroleum gases, liquefied, sweetened; Petroleum gas (A complex combination of hydrocarbons obtained by subjecting liquefied petroleum gas mix to a sweetening process to convert mercaptans or to remove acidic impurities. It consists of hydrocarbons having carbon numbers predominantly in the range of C_3 through C_7 and boiling in the range of approximately –40 °C to 80 °C.)	649-203-00-1	270-705-8	68476-86-8	H, K, S
Gases (petroleum), C_{3-4}, isobutane-rich; Petroleum gas (A complex combination of hydrocarbons from the distillation of saturated and unsaturated hydrocarbons usually ranging in carbon numbers from C_3 through C_6, predominantly butane and isobutane. It consists of saturated and unsaturated hydrocarbons having carbon numbers in the range of C_3 through C_4, predominantly isobutane.)	649-204-00-7	270-724-1	68477-33-8	H, K
Distillates (petroleum), C_{3-6}, piperylene-rich; Petroleum gas (A complex combination of hydrocarbons from the distillation of saturated and unsaturated aliphatic hydrocarbons usually ranging in the carbon numbers C_3 through C_6. It consists of saturated and unsaturated hydrocarbons having carbon numbers in the range of C_3 through C_6, predominantly piperylenes.)	649-205-00-2	270-726-2	68477-35-0	H, K

▼M45

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), butane splitter overheads; Petroleum gas (A complex combination of hydrocarbons obtained from the distillation of the butane stream. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_3 through C_4.)	649-206-00-8	270-750-3	68477-69-0	H, K
Gases (petroleum), C_{2-3}; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of products from a catalytic fractionation process. It contains predominantly ethane, ethylene, propane, and propylene.)	649-207-00-3	270-751-9	68477-70-3	H, K
Gases (petroleum), catalytic-cracked gas oil depropaniser bottoms, C_4-rich acid-free; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation of catalytic cracked gas oil hydrocarbon stream and treated to remove hydrogen sulphide and other acidic components. It consists of hydrocarbons having carbon numbers in the range of C_3 through C_5, predominantly C_4.)	649-208-00-9	270-752-4	68477-71-4	H, K
Gases (petroleum), catalytic-cracked naphtha debutaniser bottoms, C_{3-5}-rich; Petroleum gas (A complex combination of hydrocarbons obtained from the stabilisation of catalytic cracked naphtha. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_3 through C_5.)	649-209-00-4	270-754-5	68477-72-5	H, K
Tail gas (petroleum), isomerised naphtha fractionation stabiliser; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation stabilisation products from isomerised naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-210-00-X	269-628-2	68308-08-7	H, K

▼M23

erionite	650-012-00-0		12510-42-8	

▼M23

Substances	Index number	EC number	CAS number	Notes
asbestos	650-013-00-6		132207-33-1 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5	

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Substances	Index number	EC number	CAS number	Notes
beryllium	004-001-00-7	231-150-7	7440-41-7	
beryllium compounds with the exception of aluminium beryllium silicates	004-002-00-2			
▼M37 Beryllium oxide	004-003-00-8	215-133-1	1304-56-9	E
▼M23 sulfallate (ISO); 2-chlorallyl diethyldithiocarbamate	006-038-00-4	202-388-9	95-06-7	
dimethylcarbamoyl chloride	006-041-00-0	201-208-6	79-44-7	
diazomethane	006-068-00-8	206-382-7	334-88-3	
▼M45 Hydrazine	007-008-00-3	206-114-9	302-01-2	E
▼M23 N,N-dimethylhydrazine	007-012-00-5	200-316-0	57-14-7	
▼M45 1,2-dimethylhydrazine	007-013-00-0	—	540-73-8	E
▼M23 salts of hydrazine	007-014-00-6			
▼M45 Isobutyl nitrite	007-017-00-2	208-819-7	542-56-3	E
▼M23 hydrazobenzene; 1,2-diphenyl-hydrazine	007-021-00-4	204-563-5	122-66-7	
hydrazine bis(3-carboxy-4-hydroxybenzensulfonate)	007-022-00-X	405-030-1		
hexamethylphosphoric triamide; hexamethylphosphoramide	015-106-00-2	211-653-8	680-31-9	

▼M23

Substances	Index number	EC number	CAS number	Notes
▼M45				
Dimethyl sulphate	016-023-00-4	201-058-1	77-78-1	E
▼M23				
diethyl sulphate	016-027-00-6	200-589-6	64-67-5	
1,3-propanesultone	016-032-00-3	214-317-9	1120-71-4	
dimethylsulfamoylchloride	016-033-00-9	236-412-4	13360-57-1	
▼M45				
Potassium dichromate	024-002-00-6	231-906-6	7778-50-9	E
Ammonium dichromate	024-003-00-1	232-143-1	7789-09-5	E
Sodium dichromate anhydrate	024-004-00-7	234-190-3	10588-01-9	E
Sodium dichromate, dihydrate	024-004-01-4	234-190-3	7789-12-0	E
▼M25				
Chromyl dichloride; chromic oxychloride	024-005-00-2	239-056-8	14977-61-8	
Potassium chromate	024-006-00-8	232-140-5	7789-00-6	
▼M23				
calcium chromate	024-008-00-9	237-366-8	13765-19-0	
strontium chromate	024-009-00-4	232-142-6	7789-06-2	
chromium III chromate; chromic chromate	024-010-00-X	246-356-2	24613-89-6	
▼M25				
Chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in Annex I to Directive 67/548/EEC	024-017-00-8	—	—	
▼M37				
Sodium chromate	024-018-00-3	231-889-5	7775-11-3	E
▼M45				
Cobalt dichloride	027-004-00-5	231-589-4	7646-79-9	E
Cobalt sulphate	027-005-00-0	233-334-2	10124-43-3	E
▼M23				
potassium bromate	035-003-00-6	231-829-8	7758-01-2	
▼M45				
Cadmium oxide	048-002-00-0	215-146-2	1306-19-0	E

▼M45

Substances	Index number	EC number	CAS number	Notes
Cadmium fluoride	048-006-00-2	232-222-0	7790-79-6	E
Cadmium chloride	048-008-00-3	233-296-7	10108-64-2	E
Cadmium sulphate	048-009-00-9	233-331-6	10124-36-4	E
Cadmium sulphide	048-010-00-4	215-147-8	1306-23-6	E
Cadmium (pyrophoric)	048-011-00-X	231-152-8	7440-43-9	E
▼M37 ———————				
▼M45 Isoprene (stabilised) 2-methyl-1,3-butadiene	601-014-00-5	201-143-3	78-79-5	D
▼M23 benzo[a]pyrene; benzo[d,e,f] chrysene	601-032-00-3	200-028-5	50-32-8	
benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	
benzo[b]fluoranthene; benzo[e] acephenanthrylene	601-034-00-4	205-911-9	205-99-2	
benzo[j]fluoranthene	601-035-00-X	205-910-3	205-82-3	
benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	
dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	
▼M36 Chrysene	601-048-00-0	205-923-4	218-01-9	
Benzo[e]pyrene	601-049-00-6	205-892-7	192-97-2	
▼M45 1,2-dibromoethane; ethylene dibromide	602-010-00-6	203-444-5	106-93-4	E
▼M23 1,2-dichloroethane; ethylene dichloride	602-012-00-7	203-458-1	107-06-2	
1,2-dibromo-3-chloropropane	602-021-00-6	202-479-3	96-12-8	
▼M25 Bromoethylene	602-024-00-2	209-800-6	593-60-2	
▼M37 Trichloroethylene; trichloroethene	602-027-00-9	201-167-4	79-01-6	

▼M37

Substances	Index number	EC number	CAS number	Notes
▼M45 Chloroprene (stabilised) 2-chlorobuta-1,3-diene	602-036-00-8	204-818-0	126-99-8	D, E
▼M37 α-Chlorotoluene; benzyl chloride	602-037-00-3	202-853-6	100-44-7	E
▼M23 α,α,α-trichlorotoluene; benzotrichloride	602-038-00-9	202-634-5	98-07-7	
▼M45 1,2,3-trichloropropane	602-062-00-X	202-486-1	96-18-4	D
▼M23 1,3-dichloro-2-propanol	602-064-00-0	202-491-9	96-23-1	
hexachlorobenzene	602-065-00-6	204-273-9	118-74-1	
▼M45 1,4-dichlorobut-2-ene	602-073-00-X	212-121-8	764-41-0	E
▼M37 2,3-dibromopropan-1-ol; 2,3-dibromo-1-propanol	602-088-00-1	202-480-9	96-13-9	E
▼M45 α, α, α, 4-tetrachlorotoluene p-chlorobenzotrichloride	602-093-00-9	226-009-1	5216-25-1	E
▼M23 ethylene oxide; oxirane	603-023-00-X	200-849-9	75-21-8	
1-chloro-2,3-epoxypropane; epichlorhydrin	603-026-00-6	203-439-8	106-89-8	
propylene oxide; 1,2-epoxypropane; methyloxirane	603-055-00-4	200-879-2	75-56-9	
▼M37 Propylene oxide; 1,2-epoxypropane; methyloxirane	603-055-00-4	200-879-2	75-56-9	E
▼M36 2,2'-Bioxirane; 1,2:3,4-diepoxybutane	603-060-00-1	215-979-1	1464-53-5	
▼M45 2,3-epoxypropan-1-ol; glycidol oxiranemethanol	603-063-00-8	209-128-3	556-52-5	E

▼M37

Substances	Index number	EC number	CAS number	Notes
Phenyl glycidyl ether; 2,3-epoxypropyl phenyl ether; 1,2-epoxy-3-phenoxypropane	603-067-00-X	204-557-2	122-60-1	E
▼M23 styrene oxide; (epoxyethyl) benzene; phenyloxirane	603-084-00-2	202-476-7	96-09-3	
▼M37 Furan	603-105-00-5	203-727-3	110-00-9	E
R-2,3-epoxy-1-propanol	603-143-00-2	404-660-4	57044-25-4	E
(R)-1-chloro-2,3-epoxypropane	603-166-00-8	424-280-2	51594-55-9	
▼M23 4-amino-3-fluorophenol	604-028-00-X	402-230-0	399-95-1	
▼M45 5-allyl-1,3-benzodioxole; safrole	605-020-00-9	202-345-4	94-59-7	E
▼M23 3-propanolide; 1,3-propiolactone	606-031-00-1	200-340-1	57-57-8	
▼M45 4,4′-bis(dimethylamino)benzophenone Michler's ketone	606-073-00-0	202-027-5	90-94-8	
▼M23 urethane(INN); ethyl carbamate	607-149-00-6	200-123-1	51-79-6	
methyl acrylamidomethoxyacetate (containing ≥ 0,1 % acrylamid)	607-190-00-X	401-890-7	77402-03-0	
methyl acrylamidoglycolate (containing ≥ 0,1 % acrylamide)	607-210-00-7	403-230-3	77402-05-2	
▼M45 Oxiranemethanol, 4-methylbenzene-sulfonate, (S)-	607-411-00-X	417-210-7	70987-78-9	
Acrylonitrile	608-003-00-4	203-466-5	107-13-1	D, E
▼M23 2-nitropropane	609-002-00-1	201-209-1	79-46-9	
▼M45 2,4-dinitrotoluene; dinitrotoluene, technical grade (1); dinitrotoluene (2)	609-007-00-9	204-450-0 (1) 246-836-1 (2)	121-14-2 (1) 25321-14-6 (2)	E

▼M23

Substances	Index number	EC number	CAS number	Notes
5-nitroacenaphthene	609-037-00-2	210-025-0	602-87-9	
2-nitronaphthalene	609-038-00-8	209-474-5	581-89-5	
4-nitrobiphenyl	609-039-00-3	202-204-7	92-93-3	
nitrofen (ISO); 2,4-dichloro-phenyl4-nitrophenyl ether	609-040-00-9	217-406-0	1836-75-5	
2-nitroanisole	609-047-00-7	202-052-1	91-23-6	
▼M45 2,6-dinitrotoluene	609-049-00-8	210-106-0	606-20-2	E
▼M37 2,3-dinitrotoluene	609-050-00-3	210-013-5	602-01-7	E
3,4-dinitrotoluene	609-051-00-9	210-222-1	610-39-9	E
3,5-dinitrotoluene	609-052-00-4	210-566-2	618-85-9	E
▼M36 Hydrazine-tri-nitromethane	609-053-00-X	414-850-9	—	
▼M37 2,5-dinitrotoluene	609-055-00-0	210-581-4	619-15-8	E
▼M45 2-nitrotoluene	609-065-00-5	201-853-3	88-72-2	E
Azobenzene	611-001-00-6	203-102-5	103-33-3	E
▼M23 methyl-ONN-azoxymethyl acetate; methyl azoxy methyl acetate	611-004-00-2	209-765-7	592-62-1	
disodium {5-[(4′-((2,6-hydroxy-3-((2-hydroxy-5-sulphophenyl) azo)phenyl)azo)(1,1′-biphenyl)-4-yl)azo]salicylato(4-)}cuprate (2-); CI Direct Brown 95	611-005-00-8	240-221-1	16071-86-6	
4-o-tolylazo-o-toluidine; 4-amino-2′,3-dimethylazobenzene; fast garnet GBC base; AAT; o-aminoazotoluene	611-006-00-3	202-591-2	97-56-3	
4-aminoazobenzene	611-008-00-4	200-453-6	60-09-3	
▼M25 Benzidine based azo dyes; 4,4'-diarylazobiphenyl dyes, with the exception of those specified elsewhere in Annex I to Directive 67/548/EEC	611-024-00-1	—	—	

▼M25

Substances	Index number	EC number	CAS number	Notes
Disodium4-amino 3-[[4′-[(2,4-diaminophenyl)azo][1,1′-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphtalene-2,7-disulphonate; C.I. Direct Black 38	611-025-00-7	217-710-3	1937-37-7	
Tetrasodium3,3′-[[1,1′-biphenyl]-4,4′-dylbis(azo)]bis[5-amino-4-hydroxynaphthalene-2,7-disulphonate]; C.I. Direct Blue 6	611-026-00-2	220-012-1	2602-46-2	
Disodium3,3′-[[1,1′-bifenyl]-4,4′ dylbis(azo)]bis[4-amino-naphthalene-1-sulphonate); C.I. Direct Red 28	611-027-00-8	209-358-4	573-58-0	

▼M36

o-Dianisidine based azo dyes; 4,4'-diarylazo-3,3'-dimethoxybi-phenyl dyes with the exception of those mentioned elsewhere in Annex I to Directive 67/548/EEC	611-029-00-9	—	—	
o-Tolidine based dyes; 4,4'-diarylazo-3,3'-dimethylbiphenyl dyes, with the exception of those mentioned elsewhere in Annex I to Directive 67/548/EEC	611-030-00-4	—	—	
1,4,5,8-Tetraaminoanthra-quinone; C.I. Disperse Blue 1	611-032-00-5	219-603-7	2475-45-8	

▼M37

6-hydroxy-1-(3-isopropoxy-propyl)-4-methyl-2-oxo-5-[4-(phenylazo)phenylazo]-1,2-dihydro-3-pyridinecarbonitrile	611-057-00-1	400-340-3	85136-74-9	
(6-(4-hydroxy-3-(2-methoxyphe-nylazo)-2-sulfonato-7-naphthy-lamino)-1,3,5-triazin-2,4-diyl)bis [(amino-1-methylethyl)-ammonium] formate	611-058-00-7	402-060-7	108225-03-2	

▼M45

Trisodium-(4′-(8-acetylamino-3,6-disulfonato-2-naphthylazo)-4″-(6-benzoylamino-3-sulfonato-2-naphthylazo)biphenyl-1,3′,3″, 1‴-tetraolato-O, O′, O″, O‴) copper(II)	611-063-00-4	413-590-3	164058-22-04	
(Methylenebis(4,1-phenylenazo (1-(3-(dimethylamino)propyl)-1,2-dihydro-6-hydroxy-4-methyl-2-oxopyridine-5,3-diyl)))-1,1′-dipyridinium dichloride dihydrochloride	611-099-00-0	401-500-5	—	

▼M37

Substances	Index number	EC number	CAS number	Notes
Phenylhydrazine [1]	612-023-00-9	202-873-5 [1]	100-63-0 [1]	E
Phenylhydrazinium chloride [2]		200-444-7 [2]	59-88-1 [2]	
Phenylhydrazine hydrochloride [3]		248-259-0 [3]	27140-08-5 [3]	
Phenylhydrazinium sulphate (2:1) [4]		257-622-2 [4]	52033-74-6 [4]	
▼M45				
2-methoxyaniline; o-anisidine,	612-035-00-4	201-963-1	90-04-0	E
▼M23				
3,3′-dimethoxybenzidine; o-dianisidine	612-036-00-X	204-355-4	119-90-4	
salts of 3,3′-dimethoxybenzidine; salts of o-dianisidine	612-037-00-5			
3,3′-dimethylbenzidine; o-tolidine	612-041-00-7	204-358-0	119-93-7	
▼M45				
4,4′-diaminodiphenylmethane; 4,4′-methylenedianiline	612-051-00-1	202-974-4	101-77-9	E
▼M23				
3,3′-dichlorobenzidine; 3,3′-dichlorobiphenyl-4,4′-ylene-diamine	612-068-00-4	202-109-0	91-94-1	
salts of 3,3′-dichlorobenzidine; salts of 3,3′-dichlorobiphenyl-4,4′-ylenediamine	612-069-00-X			
▼M45				
N-nitrosodimethylamine; dimethylnitrosamine	612-077-00-3	200-549-8	62-75-9	E
▼M23				
2,2′-dichloro-4,4′-methylenedianiline; 4,4′-methylene bis(2-chloroaniline)	612-078-00-9	202-918-9	101-14-4	
salts of 2,2′-dichloro-4,4-methylenedianiline; salts of 4,4′-methylenebis(2-chloroaniline)	612-079-00-4			
salts of 3,3′-dimethylbenzidine; salts of o-tolidine	612-081-00-5			
1-methyl-3-nitro-1-nitrosoguanidine	612-083-00-6	200-730-1	70-25-7	
4,4′-methylenedi-o-toluidine	612-085-00-7	212-658-8	838-88-0	

▼M23

Substances	Index number	EC number	CAS number	Notes
2,2′-(nitrosoimino)bisethanol	612-090-00-4	214-237-4	1116-54-7	
o-toluidine	612-091-00-X	202-429-0	95-53-4	
nitrosodipropylamine	612-098-00-8	210-698-0	621-64-7	
4-methyl-m-phenylenediamine	612-099-00-3	202-453-1	95-80-7	

▼M25

Toluene-2,4-diammonium sulphate	612-126-00-9	265-697-8	65321-67-7	

▼M27

4-chloraniline	612-137-00-9	203-401-0	106-47-8	

▼M45

Diaminotoluene, technical product — mixture of (2) and (3) Methyl-phenylenediamine (1) 4-methyl-m-phenylene diamine (2) 2-methyl-m-phenylene diamine (3)	612-151-00-5	246-910-3 (1) 202-453-1 (2) 212-513-9 (3)	25376-45-8 (1) 95-80-7 (2) 823-40-5 (3)	E
4-chloro-o-toluidine (1) 4-chloro-o-toluidine hydrochloride (2)	612-196-00-0	202-441-6 (1) 221-627-8 (2)	95-69-2 (1) 3165-93-3 (2)	E
2,4,5-trimethylaniline (1) 2,4,5-trimethylaniline hydrochloride (2)	612-197-00-6	205-282-0 (1)-(2)	137-17-7 (1) 21436-97-5 (2)	E
4,4′-thiodianiline (1) and its salts	612-198-00-1	205-370-9 (1)	139-65-1 (1)	E
4,4′-oxydianiline (1) and its salts p-aminophenyl ether (1)	612-199-00-7	202-977-0 (1)	101-80-4 (1)	E
2,4-diaminoanisole (1) 4-methoxy-m-phenylenediamine 2,4-diaminoanisole sulphate (2)	612-200-00-0	210-406-1 (1) 254-323-9 (2)	615-05-4 (1) 39156-41-7 (2)	
N,N,N′,N′-tetramethyl-4,4′-methylendianiline	612-201-00-6	202-959-2	101-61-1	
C.I. Basic Violet 3 with ≥ 0,1 % of Michler's ketone (EC No 202-027-5)	612-205-00-8	208-953-6	548-62-9	E
6-methoxy-m-toluidine p-cresidine	612-209-00-X	204-419-1	120-71-8	E

▼M23

Substances	Index number	EC number	CAS number	Notes
ethyleneimine; aziridine	613-001-00-1	205-793-9	151-56-4	
▼M45 2-methylaziridine; propyleneimine	613-033-00-6	200-878-7	75-55-8	E
▼M23 captafol (ISO); 1,2,3,6-tetrahydro-N-(1,1,2,2-tetrachloroethylthio) phthalimide	613-046-00-7	219-363-3	2425-06-1	
carbadox (INN); methyl 3-(quinoxalin-2-ylmethylene) carbazate 1,4-dioxide; 2-(methoxycarbonylhydrazonomethyl) quinoxaline 1,4-dioxide	613-050-00-9	229-879-0	6804-07-5	
▼M45 A mixture of 1,3,5-tris(3-aminomethylphenyl)-1,3,5-(1H,3H,5H)-triazine-2,4,6-trione; a mixture of oligomers of 3,5-bis(3-aminomethylphenyl)-1-poly(3,5-bis(3-aminomethylphenyl)-2,4,6-trioxo-1,3,5-(1H,3H,5H)-triazin-1-yl)-1,3,5-(1H,3H,5H)-triazine-2,4,6-trione	613-199-00-X	421-550-1	—	
▼M23 acrylamide	616-003-00-0	201-173-7	79-06-1	
thioacetamide	616-026-00-6	200-541-4	62-55-5	
▼M37 A mixture of: N-[3-hydroxy-2-(2-methylacryloylaminomethoxy)propoxymethyl]-2-methylacrylamide; N-[2,3-Bis-(2-methylacryloylaminomethoxy)propoxymethyl]-2-methylacrylamide; methacrylamide; 2-methyl-N-(2-methylacryloylaminomethoxymethyl)-acrylamide; N-2,3-dihydroxypropoxymethyl)-2-methylacrylamide	616-057-00-5	412-790-8	—	
▼M23 Distillates (coal tar), benzole fraction; Light oil (A complex combination of hydrocarbons obtained by the distillation of coal tar. It consists of hydrocarbons having carbon numbers primarily in the range of C_4 to C_{10} and distilling in the approximate range of 80 °C to 160 °C (175 °F to 320° F).)	648-001-00-0	283-482-7	84650-02-2	

▼M23

Substances	Index number	EC number	CAS number	Notes
Tar oils, brown-coal; Light oil (The distillate from lignite tar boiling in the range of approximately 80 °C to 250 °C (176° F to 482° F). Composed primarily of aliphatic and aromatic hydrocarbons and monobasic phenols.)	648-002-00-6	302-674-4	94114-40-6	J
Benzol forerunnings (coal); Light oil redistillate, low boiling (The distillate from coke oven light oil having an approximate distillation range below 100 °C (212° F). Composed primarily of C_4 to C_6 aliphatic hydrocarbons.)	648-003-00-1	266-023-5	65996-88-5	J
Distillates (coal tar), benzole fraction, BTX-rich; Light oil redistillate, low boiling (A residue from the distillation of crude benzole to remove benzole fronts. Composed primarily of benzene, toluene and xylenes boiling in the range of approximately 75 °C to 200 °C (167° F to 392° F).)	648-004-00-7	309-984-9	101896-26-8	J
Aromatic hydrocarbons, C_{6-10}, C_8-rich; Light oil redistillate, low boiling	648-005-00-2	292-697-5	90989-41-6	J
Solvent naphtha (coal), light; Light oil redistillate, low boiling	648-006-00-8	287-498-5	85536-17-0	J
Solvent naphtha (coal), xylene-styrene cut; Light oil redistillate, intermediate boiling	648-007-00-3	287-502-5	85536-20-5	J
Solvent naphtha (coal), coumarone-styrene contg.; Light oil redistillate, intermediate boiling	648-008-00-9	287-500-4	85536-19-2	J
Naphtha (coal), distn. residues; Light oil redistillate, high boiling (The residue remaining from the distillation of recovered naphtha. Composed primarily of naphthalene and condensation products of indene and styrene.)	648-009-00-4	292-636-2	90641-12-6	J
Aromatic hydrocarbons, C_8; Light oil redistillate, high boiling	648-010-00-X	292-694-9	90989-38-1	J

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▼M23

Substances	Index number	EC number	CAS number	Notes
Aromatic hydrocarbons, C_{8-9}, hydrocarbon resin polymn. by-product; Light oil redistillate, high boiling (A complex combination of hydrocarbons obtained from the evaporation of solvent under vacuum from polymerized hydrocarbon resin. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C_8 through C_9 and boiling in the range of approximately 120 °C to 215 °C (248° C to 419° F).)	648-012-00-0	295-281-1	91995-20-9	J
Aromatic hydrocarbons, C_{9-12}, benzene distn.; Light oil redistillate, high boiling	648-013-00-6	295-551-9	92062-36-7	J
Extract residues (coal), benzole fraction alk., acid ext.; Light oil extract residues, low boiling (The redistillate from the distillate, freed of tar acids and tar bases, from bituminous coal high temperature tar boiling in the approximate range of 90 °C to 160 °C (194° F to 320° F). It consists predominantly of benzene, toluene and xylenes.)	648-014-00-1	295-323-9	91995-61-8	J
Extract residues (coal tar), benzole fraction alk., acd ext.; Light oil extract residues, low boiling (A complex combination of hydrocarbons obtained by the redistillation of the distillate of high temperature coal tar (tar acid and tar base free). It consists predominantly of unsubstituted and substituted mononuclear aromatic hydrocarbons boiling in the range of 85 °C—195 °C (185° F—383° F).)	648-015-00-7	309-868-8	101316-63-6	J
Extract residues (coal), benzole fraction acid; Light oil extract residues, low boiling (An acid sludge by-product of the sulphuric acid refining of crude high temperature coal. Composed primarily of sulfuric acid and organic compounds.)	648-016-00-2	298-725-2	93821-38-6	J
Extract residues (coal), light oil alk., distn. overheads; Light oil extract residues, low boiling (The first fraction from the distillation of aromatic hydrocarbons, coumarone, naphthalene and indene rich prefactionator bottoms or	648-017-00-8	292-625-2	90641-02-4	J

▼M23

Substances	Index number	EC number	CAS number	Notes
washed carbolic oil boiling substantially below 145 °C (293° F). Composed primarily of C_7 and C_8 aliphatic and aromatic hydrocarbons.)				
Extract residues (coal), light oil alk., acid ext., indene fraction; Light oil extract residues, intermediate boiling	648-018-00-3	309-867-2	101316-62-5	J
Extract residues (coal), light oil alk., indene naphtha fraction; Light oil extract residues, high boiling (The distillate from aromatic hydrocarbons, coumarone, naphthalene and indene rich prefractionator bottoms or washed carbolic oils, having an approximate boiling range of 155 °C to 180 °C (311° F to 356° F). Composed primarily of indene, indan and trimethylbenzenes.)	648-019-00-9	292-626-8	90641-03-5	J
Solvent naphtha (coal); Light oil extract residues, high boiling (The distillate from either high temperature coal tar, coke oven light oil, or coal tar oil alkaline extract residue having an approximate distillation range of 130 °C to 210 °C (266° F to 410° F) Composed primarily of indene and other polycyclic ring systems containing a single aromatic ring. May contain phenolic compounds and aromatic nitrogen bases.)	648-020-00-4	266-013-0	65996-79-4	J
Distillates (coal tar), light oils, neutral fraction; Light oil extract residues, high boiling (A distillate from the fractional distillation of high temperature coal tar. Composed primarily of alkyl-substituted one ring aromatic hydrocarbons boiling in the range of approximately 135 °C to 210 °C (275° F to 410° F). May also include unsaturated hydrocarbons such as indene and coumarone.)	648-021-00-X	309-971-8	101794-90-5	J
Distillates (coal tar), light oils, acid exts.; Light oil extract residues, high boiling (This oil is a complex mixture of aromatic hydrocarbons, primarily indene, naphthalene, coumarone, phenol and o-, m- and p-cresol and boiling in the range of 140 °C to 215 °C (284° F to 419° F).)	648-022-00-5	292-609-5	90640-87-2	J

▼M23

Substances	Index number	EC number	CAS number	Notes
Distillates (coal tar), light oils; Carbolic oil (A complex combination of hydrocarbons obtained by distillation of coal tar. It consists of aromatic and other hydrocarbons, phenolic compounds and aromatic nitrogen compounds and distills at the approximate range of 150 °C to 210 °C (302° F to 410° F).)	648-023-00-0	283-483-2	84650-03-3	J
Tar oils, coal; Carbolic oil (The distillate from high temperature coal tar having an approximate distillation range of 130 °C to 250 °C (266° F to 410° F). Composed primarily of naphthalene, alkylnaphthalenes, phenolic compounds, and aromatic nitrogen bases.)	648-024-00-6	266-016-7	65996-82-9	J

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Extract residues (coal), light oil alk., acid ext.; Carbolic oil extract residue (The oil resulting from the acid washing of alkali-washed carbolic oil to remove the minor amounts of basic compounds (tar bases). Composed primarily of indene, indan and alkylbenzenes.)	648-026-00-7	292-624-7	90641-01-3	J
Extract residues (coal), tar oil alk.; Carbolic oil extract residue (The residue obtained from coal tar oil by an alkaline wash such as aqueous sodium hydroxide after the removal of crude coal tar acids. Composed primarily of naphthalenes and aromatic nitrogen bases.)	648-027-00-2	266-021-4	65996-87-4	J
Extract oils (coal), light oil; Acid Extract (The aqueous extract produced by an acidic wash of alkali-washed carbolic oil. Composed primarily of acid salts of various aromatic nitrogen bases including pyridine, quinoline and their alkyl derivatives.)	648-028-00-8	292-622-6	90640-99-6	J
Pyridine, alkyl derivs.; Crude tar bases (The complex combination of polyalkylated pyridines derived from coal tar distillation or as high-boiling distillates approximately above 150 °C (302° F)	648-029-00-3	269-929-9	68391-11-7	J

▼M23

Substances	Index number	EC number	CAS number	Notes
from the reaction of ammonia with acetaldehyde, formaldehyde or paraformaldehyde.)				
Tar bases, coal, picoline fraction; Distillate bases (Pyridine bases boiling in the range of approximately 125 ºC to 160 ºC (257º F to 320º F) obtained by distillation of neutralized acid extract of the base-containing tar fraction obtained by the distillation of bituminous coal tars. Composed chiefly of lutidines and picolines.)	648-030-00-9	295-548-2	92062-33-4	J
Tar bases, coal, lutidine fraction; Distillate bases	648-031-00-4	293-766-2	91082-52-9	J
Extract oils (coal), tar base, collidine fraction; Distillate bases (The extract produced by the acid extraction of bases from crude coal tar aromatic oils, neutralization, and distillation of the bases. Composed primarily of collidines, aniline, toluidines, lutidines, xylidines.)	648-032-00-X	273-077-3	68937-63-3	J
Tar bases, coal, collidine fraction; Distillate bases (The destillation fraction boiling in the range of approximately 181 ºC to 186 ºC (356º F to 367º F) from the crude bases obtained from the neutralized, acid-extracted base-containing tar fractions obtained by the distillation of bituminous coal tar. It contains chiefly aniline and collidines.)	648-033-00-5	295-543-5	92062-28-7	J
Tar Bases, coal, aniline fraction; Distillate bases (The destillation fraction boiling in the range of approximately 180 ºC to 200 ºC (356º F to 392º F) from the crude bases obtained by dephenolating and debasing the carbolated oil from the distillation of coal tar. It contains chiefly aniline, collidines, lutidines and toluidines.)	648-034-00-0	295-541-4	92062-27-6	J
Tar bases, coal, toluidine fraction; Distillate bases	648-035-00-6	293-767-8	91082-53-0	J
Distillates (petroleum), alkene-alkyene manuf. pyrolysis oil, mixed with high-temp. coal tar, indene fraction; Redistillates (A complex combination of hydrocarbons obtained as a	648-036-00-1	295-292-1	91995-31-2	J

▼M23

Substances	Index number	EC number	CAS number	Notes
redistillate from the fractional distillation of bituminous coal high temperature tar and residual oils that are obtained by the pyrolytic production of alkenes and alkynes from petroleum products or natural gas. It consists predominantly of indene and boils in a range of approximately 160 °C to 190 °C (320° F to 374° F).)				
Distillates (coal), coal tar-residual pyrolysis oils, naphthalene oils; Redistillates (The redistillate obtained from the fractional distillation of bituminous coal high temperature tar and pyrolysis residual oils and boiling in the range of approximately 190 °C to 270 °C (374 °F to 518 °F). Composed primarily of substituted dinuclear aromatics.)	648-037-00-7	295-295-8	91995-35-6	J
Extract oils (coal), coal tar-residual pyrolysis oils, naphthalene oil, redistillate; Redistillates (The redistillate from the fractional distillation of dephenolated and debased methylnaphthalene oil obtained from bituminous coal high temperature tar and pyrolysis residual oils boiling in the approximate range of 220 °C to 230 °C (428° F to 446° F). It consists predominantly of unsubstituted and substituted dinuclear aromatic hydrocarbons.)	648-038-00-2	295-329-1	91995-66-3	J
Extract oils (coal), coal tar-residual pyrolysis oils, naphthalene oils; Redistillates (A neutral oil obtained by debasing and dephenolating the oil obtained from the distillation of high temperature tar and pyrolysis residual oils which has a boiling range of 225 °C to 255 °C (437° F to 491° F). Composed primarily of substituted dinuclear aromatic hydrocarbons.)	648-039-00-8	310-170-0	122070-79-5	J
Extract oils (coal), coal tar residual pyrolysis oils, naphthalene oil, distn. residues; Redistillates (Residue from the distillation of dephenolated and debased methylnaphthalene oil (from bituminous coal tar and pyrolysis residual oils) with a boiling range of 240 °C to	648-040-00-3	310-171-6	122070-80-8	J

▼M23

Substances	Index number	EC number	CAS number	Notes
260 °C (464° F to 500° F). Composed primarily of substituted dinuclear aromatic and heterocyclic hydrocarbons.)				
Absorption oils, bicyclo arom. and heterocyclic hydrocarbon fraction; Wash oil redistillate (A complex combination of hydrocarbons obtained as a redistillate from the distillation of wash oil. It consists predominantly of 2-ringed aromatic and heterocyclic hydrocarbons boiling in the range of approximately 260 °C to 290 °C (500° F to 554° F).)	648-041-00-9	309-851-5	101316-45-4	M
Distillates (coal tar), upper, fluorene-rich; Wash oil redistillate (A complex combination of hydrocarbons obtained by the crystallization of tar oil. It consists of aromatic and polycyclic hydrocarbons primarily fluorene and some acenaphthene.)	648-042-00-4	284-900-0	84989-11-7	M
▼M45 Creosote oil, acenaphthene fraction, acenaphthene-free; Wash oil redistillate (The oil remaining after removal by a crystallisation process of acenaphthene from acenaphthene oil from coal tar. Composed primarily of naphthalene and alkylnaphthalenes.)	648-043-00-X	292-606-9	90640-85-0	H
▼M23 Distillates (coal tar), heavy oils; Heavy anthracene oil (Distillate from the fractional distillation of coal tar of bituminous coal, with boiling range of 240 °C to 400 °C (464° F to 752° F). Composed primarily of tri- and polynuclear hydrocarbons and heterocyclic compounds.)	648-044-00-5	292-607-4	90640-86-1	
Anthracene oil, acid ext.; Anthracene oil extract residue (A complex combination of hydrocarbons from the base-freed fraction obtained from the distillation of coal tar and boiling in the range of approximately 325 °C to 365 °C (617° F to 689° F). It contains predominantly anthracene and phenanthrene and their alkyl derivatives.)	648-046-00-6	295-274-3	91995-14-1	M

▼M23

Substances	Index number	EC number	CAS number	Notes
Distillates (coal tar); Heavy anthracene oil (The distillate from coal tar having an approximate distillation range of 100 °C to 450 °C (212° F to 842° F). Composed primarily of two to four membered condensed ring aromatic hydrocarbons, phenolic compounds, and aromatic nitrogen bases.)	648-047-00-1	266-027-7	65996-92-1	M
Distillates (coal tar), pitch, heavy oils; Heavy anthracene oil (The distillate from the distillation of the pich obtained from bituminous high temperature tar. Composed primarily of tri- and polynuclear aromatic hydrocarbons and boiling in the range of approximately 300 °C to 470 °C (572° F to 878° F). The product may also contain heteroatoms.)	648-048-00-7	295-312-9	91995-51-6	M
Distillates (coal tar), pitch; Heavy anthracene oil (The oil obtained from condensation of the vapors from the heat treatment of pitch. Composed primarily of two- to four-ring aromatic compounds boiling in the range of 200 °C to greater than 400 °C (392° F to greater than 752° F.).)	648-049-00-2	309-855-7	101316-49-8	M
Distillates (coal tar), heavy oils, pyrene fraction; Heavy anthracene oil redistillate (The redistillate obtained from the fractional distillation of pitch distillate boiling in the range of approximately 350 °C to 400 °C (662° F to 752° F). Consists predominantly of tri- and polynuclear aromatic and heterocyclic hydrocarbons.)	648-050-00-8	295-304-5	91995-42-5	M
Distillates (coal tar), pitch, pyrene fraction; Heavy anthracene oil redistillate (The redistillate obtained from the fractional distillation of pitch distillate and boiling in the range of approximately 380 °C to 410 °C (716° F to 770° F). Composed primarily of tri- and polynuclear aromatic hydrocarbons and heterocyclic compounds.)	648-051-00-3	295-313-4	91995-52-7	M
Paraffin waxes (coal), brown-coal high-temp. tar, carbon-treated; Coal tar extract (A complex combination of hydrocarbons obtained by the	648-052-00-9	308-296-6	97926-76-6	M

▼M23

Substances	Index number	EC number	CAS number	Notes
treatment of lignite carbonization tar with activated carbon for removal of trace constituents and impurities. It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than C_{12}.)				
Paraffin waxes (coal), brown-coal high-temp. tar, carbon-treated; Coal tar extract (A complex combination of hydrocarbons obtained by the treatment of lignite carbonization tar with bentonite for removal of trace constituents and impurities. It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than C_{12}.)	648-053-00-4	308-297-1	97926-77-7	M
Pitch; Pitch	648-054-00-X	263-072-4	61789-60-4	M
Pitch, coal tar, high temp.; Pitch (The residue from the distillation of high temperature coal tar. A black solid with an approximate softening point from 30 °C to 180 °C (86° F to 356° F). Composed primarily of a complex mixture of three or more membered condensed ring aromatic hydrocarbons.)	648-055-00-5	266-028-2	65996-93-2	
Pitch, coal tar, high temp., heat-treated; Pitch (The heat treated residue from the distillation of high temperature coal tar. A black solid with an approximate softening point from 80 °C to 180 °C (176° F to 356° F). Composed primarily of a complex mixture of three or more membered condensed ring aromatic hydrocarbons.)	648-056-00-0	310-162-7	121575-60-8	M
Pitch, coal tar, high temp., secondary; Pitch redistillate (The residue obtained during the distillation of high boiling fractions from bituminous coal high temperature tar and/or pitch coke oil, with a softening point of 140 °C to 170 °C (284° F to 392° F) according to DIN 52025. Composed primarily of tri- and polynuclear aromatic compounds which also contain heteroatoms.)	648-057-00-6	302-650-3	94114-13-3	M

▼M23

Substances	Index number	EC number	CAS number	Notes
Residues (coal tar), pitch distn.; Pitch redistillate (Residue from the fractional distillation of pitch distillate boiling in the range of approximately 400 °C to 470 °C (752° F to 846° F). Composed primarily of polynuclear aromatic hydrocarbons, and heterocyclic compounds.)	648-058-00-1	295-507-9	92061-94-4	M
Tar, coal, high-temp., distn. and storage residues; Coal tar solids residue (Coke- and ash-containing solid residues that separate on distillation and thermal treatment of bituminous coal high temperature tar in distillation installations and Torage vessels. Consists predominantly of carbon and contains a small quantity of hero compounds as well as ash components.)	648-059-00-7	295-535-1	92062-20-9	M
Tar, coal, storage residues; Coal tar solids residue (The deposit removed from crude coal tar storages. Composed primarily of coal tar and carbonaceous particulate matter.)	648-060-00-2	293-764-1	91082-50-7	M
Tar, coal, high-temp., residues; Coal tar solids residue (Solids formed during the coking of bituminous coal to produce crude bituminous coal high temperature tar. Composed primarily of coke and coal particles, highly aromatized compounds and mineral substances.)	648-061-00-8	309-726-5	100684-51-3	M
Tar, coal, high-temp., high-solids; Coal tar solids residue (The condensation product obtained by cooling, to approximately ambient temperature, the gas evolved in the high temperature (greater than 700 °C (1292° F)) destructive distillation of coal. Composed primarily of a complex mixture of condensed ring aromatic hydrocarbons with a high solid content of coal-type materials.)	648-062-00-3	273-615-7	68990-61-4	M
Waste solids, coal-tar pitch coking; Coal tar solids residue (The combination of wastes formed by the coking of bituminous coal tar pitch. It consists predominantly of carbon.)	648-063-00-9	295-549-8	92062-34-5	M

▼M23

Substances	Index number	EC number	CAS number	Notes
Extract residues (coal), brown; Coal tar extract (The residue from extraction of dried coal.)	648-064-00-4	294-285-0	91697-23-3	M
Paraffin waxes (coal), brown-coal-high-temp. tar; Coal tar extract (A complex combination of hydrocarbons obtained from lignite carbonization tar by solvent crystallisation (solvent deoiling), by sweating or an adducting process. It consists predominantly of straight and branched chain saturated hydrocarbons having carbon numbers predominantly greater than C_{12}.)	648-065-00-X	295-454-1	92045-71-1	M
Paraffin waxes (coal), brown-coal-high-temp. tar, hydrotreated; Coal tar extract (A complex combination of hydrocarbons obtained from lignite carbonization tar by solvent crystallisation (solvent deoiling), by sweating or an adducting process treated with hydrogen in the presence of a catalyst. It consists predominantly of straight and branched chain saturated hydrocarbons having carbon numbers predominantly greater than C_{12}.)	648-066-00-5	295-455-7	92045-72-2	M
Paraffin waxes (coal), brown-coal high-temp tar, silicic acid-treated; Coal tar extract (A complex combination of hydrocabons obtained by the treatment of lignite carbonization tar with silicic acid for removal of trace constituents and impurities. It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than C_{12}.)	648-067-00-0	308-298-7	97926-78-8	M
Tar, coal, low-temp., distn. residues; Tar oil, intermediate boiling (Residues from fractional distillation of low temperature coal tar to remove oils that boil in a range up to approximately 300 °C (572 °F). Composed primarily of aromatic compounds.)	648-068-00-6	309-887-1	101316-85-2	M
Pitch, coal tar, low-temp; Pitch residue (A complex black solid or semi-solid obtained from the distillation of a low temperature coal tar. It has a softening	648-069-00-1	292-651-4	90669-57-1	M

▼M23

Substances	Index number	EC number	CAS number	Notes
point within the approximate range of 40 °C to 180 °C (104 °F to 356 °F). Composed primarily of a complex mixture of hydrocarbons.)				
Pitch, coal tar, low-temp., oxidized; Pitch residue, oxidised (The product obtained by air-blowing, at elevated temperature, low-temperature coal tar pitch,. It has a softening-point within the approximate range of 70 °C to 180 °C (158 °F to 356 °F). Composed primarily of a complex mixture of hydrocarbons.)	648-070-00-7	292-654-0	90669-59-3	M
Pitch, coal tar, low-temp., heat-treated; Pitch residue, oxidised; Pitch residue, heat-treated (A complex black solid obtained by the heat treatment of low temperature coal tar pitch. It has a softening point within the approximate range of 50 °C to 140 °C (122 °F to 284 °F). Composed primarily of a complex mixture of aromatic compounds.)	648-071-00-2	292-653-5	90669-58-2	M
Distillates (coal-petroleum), condensed-ring arom; Distillates (The distillate from a mixture of coal and tar and aromatic petroleum streams having an approximate distillation range of 220 °C to 450 °C (428 °F to 842 °F). Composed primarily of 3- to 4-membered condensed ring aromatic hydrocarbons.)	648-072-00-8	269-159-3	68188-48-7	M
Aromatic hydrocarbons, C_{20-28}, polycyclic, mixed coal-tar pitch-polyethylene-polypropylene pyrolysis-derived; Pyrolysis products (A complex combination of hydrocarbons obtained from mixed coal tar pitch-polyethylene-polypropylene pyrolysis. Composed primarily of polycyclic aromatic hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{28} and having a softening point of 100 °C to 220 °C (212 °F to 428 °F) according to DIN 52025.)	648-073-00-3	309-956-6	101794-74-5	M

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Substances	Index number	EC number	CAS number	Notes
Aromatic hydrocarbons, C_{20-28}, polycyclic, mixed coal-tar pitch-polyethylene pyrolysis-derived; Pyrolysis products (A complex combination of hydrocarbons obtained from mixed coal tar pitch-polyethylene pyrolysis. Composed primarily of polycyclic aromatic hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{28} and having a softening point of 100 °C to 220 °C (212 °F to 428 °F) according to DIN 52025.)	648-074-00-9	309-957-1	101794-75-6	M
Aromatic hydrocarbons, C_{20-28}, polycyclic, mixed coal-tar pitch-polystyrene pyrolysis-derived; Pyrolysis products (A complex combination of hydrocarbons obtained from mixed coal tar pitch-polystyrene pyrolysis. Composed primarily of polycyclic aromatic hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{28} and having a softening point of 100 °C to 220 °C (212 °F to 428 °F) according to DIN 52025.)	648-075-00-4	309-958-7	101794-76-7	M
Pitch, coal tar-petroleum; Pitch residues (The residue from the distillation of a mixture of coal tar and aromatic petroleum streams. A solid with a softening point from 40 °C to 180 °C (140 °F to 356 °F). Composed primarily of a complex combination of three or more membered condensed ring aromatic hydrocarbons.)	648-076-00-X	269-109-0	68187-57-5	M
Phenanthrene, distn. residues; Heavy anthracene oil redistillate (Residue from the distillation of crude phenanthrene boiling in the approximate range of 340 °C to 420 °C (644 °F to 788 °F). It consists predominantly of phenanthrene, anthracene and carbazole.)	648-077-00-5	310-169-5	122070-78-4	M
Distillates (coal tar), upper, fluorene-free; Wash oil redistillate (A complex combination of hydrocarbons obtained by the crystallization of tar oil. It consists of aromatic polycyclic hydrocarbons, primarily diphenyl, dibenzofuran and acenaphthene.)	648-078-00-0	284-899-7	84989-10-6	M

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Substances	Index number	EC number	CAS number	Notes
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Residues (coal tar), creosote oil distillation; Wash oil redistillate (The residue from the fractional distillation of wash oil boiling in the approximate range of 270 °C to 330 °C. It consists predominantly of dinuclear aromatic and heterocyclic hydrocarbons.)	648-080-00-1	295-506-3	92061-93-3	H
▼M23				
Distillates (coal), coke-oven light oil, naphthalene cut; Naphthalene oil (The complex combination of hydrocarbons obtained from prefractionation (continuous distillation) of coke oven light oil. It consists predominantly of naphthalene, coumarone and indene and boils above 148 °C (298 °F).)	648-084-00-3	285-076-5	85029-51-2	J, M
Distillates (coal tar), naphthalene oils, naphthalene-low; Napththalene oil redistillate (A complex combination of hydrocarbons obtained by crystallization of naphthalene oil. Composed primarily of naphthalene, alkyl naphthalenes and phenolic compounds.)	648-086-00-4	284-898-1	84989-09-3	J, M
Distillates (coal tar), naphthalene oil crystn. mother liquor; Naphthalene oil redistillate (A complex combination of organic compounds obtained as a filtrate from the crystallization of the naphthalene fraction from coal tar and boiling in the range of approximately 200 °C to 230 °C (392 °F to 446 °F). Contains chiefly naphthalene, thionaphthene and alkylnaphthalenes.)	648-087-00-X	295-310-8	91995-49-2	J, M
Extract residues (coal), naphthalene oil, alk.; Naphthalene oil extract residue (A complex combination of hydrocarbons obtained from the alkali washing of naphthalene oil to remove phenolic compounds (tar acids). It is composed of naphthalene and alkyl naphthalenes.)	648-088-00-5	310-166-9	121620-47-1	J, M
Extract residues (coal), naphthalene oil, alk., naphthalene-low; Naphthalene oil extract residue (A complex combination of hydrocarbons remaining after	648-089-00-0	310-167-4	121620-48-2	J, M

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Substances	Index number	EC number	CAS number	Notes
the removal of naphthalene from alkali-washed naphthalene oil by a crystallization process. It is composed primarily of naphthalene and alkyl naphthalenes.)				
Distillates (coal tar), naphthalene oils, naphthalene-free, alk. exts.; Naphthalene oil extract residue (The oil remaining after the removal of phenolic compounds (tar acids) from drained naphthalene oil by an alkali wash. Composed primarily of naphthalene and alkyl naphthalenes.)	648-090-00-6	292-612-1	90640-90-7	J, M
Extract residues (coal), naphthalene oil alk., distn. overheads; Naphthalene oil extract residue (The distillation from alkali-washed naphthalene oil having an approximate distillation range of 180 °C to 220 °C (356 °F to 428 °F). Composed primarily of naphthalene, alkylbenzenes, indene and indan.)	648-091-00-1	292-627-3	90641-04-6	J, M
Distillates (coal tar), naphthalene oils, methylnaphthalene fraction; Methylnaphthalene oil (A distillate from the fractional distillation of high temperature coal tar. Composed primarily of substituted two ring aromatic hydrocarbons and aromatic nitrogen bases boiling in the range of approximately 225 °C to 255 °C (437 °F to 491 °F).)	648-092-00-7	309-985-4	101896-27-9	J, M
Distillates (coal tar), naphthalene oils, indole-methylnaphthalene fraction; Methylnaphthalene oil (A distillate from the fractional distillation of high temperature coal tar. Composed primarily of indole and methylnaphthalene boiling in the range of approximately 235 °C to 255 °C (455 °F to 491 °F).)	648-093-00-2	309-972-3	101794-91-6	J, M
Distillates (coal tar), naphthalene oils, acid exts.; Methylnaphtalene oil extract residue (A complex combination of hydrocarbons obtained by debasing the methylnaphthalene fraction obtained by the distillation of coal tar and boiling in the range of approximately 230 °C to 255 °C (446 °F to 491 °F). Contains chiefly 1(2)-methylnaphthalene, naphthalene,	648-094-00-8	295-309-2	91995-48-1	J, M

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Substances	Index number	EC number	CAS number	Notes
dimethylnaphthalene and biphenyl.)				
Extract residues (coal), naphthalene oil alk., distn. residues; Methylnaphthalene oil extract residue (The residue from the distillation of alkali-washed naphthalene oil having an approximate distillation range of 220 °C to 300 °C (428 °F to 572 °F). Composed primarily of naphthalene, alkylnaphthalenes and aromatic nitrogen bases.)	648-095-00-3	292-628-9	90641-05-7	J, M
Extract oils (coal), acidic, tar-base free; Methylnaphthalene oil extract residue (The extract oil boiling in the range of approximately 220 °C to 265 °C (428 °F to 509 °F) from coal tar alkaline extract residue produced by an acidic wash such as aqueous sulfuric acid after distillation to remove tar bases. Composed primarily of alkylnaphthalenes.)	648-096-00-9	284-901-6	84989-12-8	J, M
Distillates (coal tar), benzole fraction, distn. residues; Wash oil (A complex combination of hydrocarbons obtained from the distillation of crude benzole (high temperature coal tar). It may be a liquid with the approximate distillation range of 150 °C to 300 °C (302 °F to 572 °F) or a semi-solid or solid with a melting point up to 70 °C (158 °F). It is composed primarily of naphthalene and alkyl naphthalenes.)	648-097-00-4	310-165-3	121620-46-0	J, M

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Creosote oil, acenaphthene fraction Wash oil	648-098-00-X	292-605-3	90640-84-9	H
Creosote oil	648-099-00-5	263-047-8	61789-28-4	H
Creosote oil, high-boiling distillate; Wash oil (The high-boiling distillation fraction obtained from the high temperature carbonisation of bituminous coal which is further refined to remove excess crystalline salts. It consists primarily of creosote oil with some of the normal polynuclear aromatic salts,	648-100-00-9	274-565-9	70321-79-8	H

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Substances	Index number	EC number	CAS number	Notes
which are components of coal tar distillates, removed. It is crystal free at approximately 5 °C.)				
Creosote	648-101-00-4	232-287-5	8001-58-9	H
Extract residues (coal), creosote oil acid; Wash oil extract residue (A complex combination of hydrocarbons from the base-freed fraction from the distillation of coal tar, boiling in the range of approximately 250 °C to 280 °C. It consists predominantly of biphenyl and isomeric diphenylnaphthalenes.)	648-102-00-X	310-189-4	122384-77-4	H

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Anthracene oil, anthracene paste; Anthracene oil fraction (The anthracene-rich solid obtained by the crystallization and centrifuging of anthracene oil. It is composed primarily of anthracene, carbazole and phenanthrene.)	648-103-00-5	292-603-2	90640-81-6	J, M
Anthracene oil, anthracene-low; Anthracene oil fraction (The oil remaining after the removal, by a crystallization process, of an anthracene-rich solid (anthracene paste) from anthracene oil. It is composed primarily of two, three and four membered aromatic compounds.)	648-104-00-0	292-604-8	90640-82-7	J, M
Residues (coal tar), anthracene oil distn.; Anthracene oil fraction (The residue from the fraction distillation of crude anthracene boiling in the approximate range of 340 °C to 400 °C (644 °F to 752 °F). It consists predominantly of tri- and poly-nuclear aromatic and hetero-cyclic hydrocarbons.)	648-105-00-6	295-505-8	92061-92-2	J, M
Anthracene oil, anthracene paste, anthracene fraction; Anthracene oil fraction (A complex combination of hydrocarbons from the distillation of anthracene obtained by the crystallization of anthracene oil from bituminous high temperature tar and boiling in the range of 330 °C to 350 °C (626 °F to 662 °F). It contains chiefly anthracene, carbazole and phenanthrene.)	648-106-00-1	295-275-9	91995-15-2	J, M

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Substances	Index number	EC number	CAS number	Notes
Anthracene oil, anthracene paste, carbazole fraction; Anthracene oil fraction (A complex combination of hydrocarbons from the distillation of anthracene obtained by crystallization of anthrancene oil from bituminous coal high temperature tar and boiling in the approximate range of 350 °C to 360 °C (662 °F to 680 °F). It contains chiefly anthracene, carbazole and phenanthrene.)	648-107-00-7	295-276-4	91995-16-3	J, M
Anthracene oil, anthracene paste, distn. lights; Anthracene oil fraction (A complex combination of hydrocarbons from the distillation of anthracene obtained by crystallization of anthracene oil from bituminous light temperature tar and boiling in the range of approximately 290 °C to 340 °C (554 °F to 644 °F). It contains chiefly trinuclear aromatics and their dihydro derivatives.)	648-108-00-2	295-278-5	91995-17-4	J, M
Tar oils, coal, low-temp.; Tar oil, high boiling (A distillate from low-temperature coal tar. Composed primarily of hydrocarbons, phenolic compounds and aromatic nitrogen bases boiling in the range of approximately 160 °C to 340 °C (320 °F to 644 °F).)	648-109-00-8	309-889-2	101316-87-4	J, M
Phenols, ammonia liquor ext.; Alkaline extract (The combination of phenols extracted, using isobutyl acetate, from the ammonia liquor condensed from the gas evolved in low-temperature (less than 700 °C (1292 °F)) destructive distillation of coal. It consists predominantly of a mixture of monohydric and dihydric phenols.)	648-111-00-9	284-881-9	84988-93-2	J, M
Distillates (coal tar), light oils, alk. exts.; Alkaline extract (The aqueous extract from carbolic oil produced by an alkaline wash such as aqueous sodium hydroxide. Composed primarily of the alkali salts of various phenolic compounds.)	648-112-00-4	292-610-0	90640-88-3	J, M

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Substances	Index number	EC number	CAS number	Notes
Extracts, coal tar oil alk.; Alkaline extract (The extract from coal tar oil produced by an alkaline wash such as aqueous sodium hydroxide. Composed primarily of the alkali salts of various phenolic compounds.)	648-113-00-X	266-017-2	65996-83-0	J, M
Distillates (coal tar), naphthalene oils, alk. exts.; Alkaline extract (The aqueous extract from naphthalene oil produced by an alkaline wash such as aqueous sodium hydroxid. Composed primarily of the alkali salts of various phenolic compounds.)	648-114-00-5	292-611-6	90640-89-4	J, M
Extract residues (coal), tar oil alk., carbonated, limed; Crude phenols (The product obtained by treatment of coal tar oil alkaline extract with CO_2 and CaO. Composed primarily of $CaCO_3$, $Ca(OH)_2$, Na_2CO_3 and other organic and inorganic impurities.)	648-115-00-0	292-629-4	90641-06-8	J, M
Tar acids, brown-coal, crude; Crude phenols (An acidified alkaline extract of brown coal tar distillate. Composed primarily of phenol and phenol homologs.)	648-117-00-1	309-888-7	101316-86-3	J, M
Tar acids, brown-coal gasification; Crude phenols (A complex combination of organic compounds obtained from brown coal gasification. Composed primarily of C_{6-10} hydroxy aromatic phenols and their homologs.)	648-118-00-7	295-536-7	92062-22-1	J, M
Tar acids, distn. residues; Distillate phenols (A residue from the distillation of crude phenol from coal. It consists predominantly of phenols having carbon numbers in the range of C_8 through C_{10} with a softening point of 60 °C to 80 °C (140 °F to 176 °F).)	648-119-00-2	306-251-5	96690-55-0	J, M
Tar acids, methylphenol fraction; Distillate phenols (The fraction of tar acid rich in 3- and 4-methylphenol, recovered by distillation of low-temperature coal tar crude tar acids.)	648-120-00-8	284-892-9	84989-04-8	J, M

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Substances	Index number	EC number	CAS number	Notes
Tar acids, polyalkylphenol fraction; Distillate phenols (The fraction of tar acids, recovered by distillation of low-temperature coal tar crude tar acids, having an approximate boiling range of 225 °C to 320 °C (437 °F to 608 °F). Composed primarily of polyalkylphenols.)	648-121-00-3	284-893-4	84989-05-9	J, M
Tar acids, xylenol fraction; Distillate phenols (The fraction of tar acids, rich in 2,4- and 2,5-dimethylphenol, recovered by distillation of low-temperature coal tar crude tar acids.)	648-122-00-9	284-895-5	84989-06-0	J, M
Tar acids, ethylphenol fraction; Distillate phenols (The fraction of tar acids, rich in 3- and 4-ethylphenol, recovered by distillation of low-temperature coal tar crude tar acids.)	648-123-00-4	284-891-3	84989-03-7	J, M
Tar acids, 3,5-xylenol fraction; Distillate phenols (The fraction of tar acids, rich in 3,5-dimethylphenol, recovered by distillation of low-temperature coal tar acids.)	648-124-00-X	284-896-0	84989-07-1	J, M
Tar acids, residues, distillates, first-cut; Distillate phenols (The residue from the distillation in the range of 235 °C to 355 °C (481 °F to 697 °F) of light carbolic oil.)	648-125-00-5	270-713-1	68477-23-6	J, M
Tar acids, cresylic, residues; Distillate phenols (The residue from crude coal tar acids after removal of phenol, cresols, xylenols and any higher boiling phenols. A black solid with a melting point approximately 80 °C (176 °F). Composed primarily of polyalkyphenols, resin gums, and inorganic salts.)	648-126-00-0	271-418-0	68555-24-8	J, M
Phenols, C_{9-11}; Distillate phenols	648-127-00-6	293-435-2	91079-47-9	J, M
Tar acids, cresylic; Distillate phenols (A complex combination of organic compounds obtained from brown coal and boiling in the range of approximately 200 °C to 230 °C (392 °F to 446 °F). It contains chiefly phenols and pyridine bases.)	648-128-00-1	295-540-9	92062-26-5	J, M

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Substances	Index number	EC number	CAS number	Notes
Tar acids, brown-coal, C_2-alkylphenol fraction; Distillate phenols (The distillate from the acidification of alkaline washed lignite tar distillate boiling in the range of approximately 200 °C to 230 °C (392 °F to 446 °F). Composed primarily of m- and p-ethylphenol as well as cresols and xylenols.)	648-129-00-7	302-662-9	94114-29-1	J, M
Extract oils (coal), naphthalene oils; Acid extract (The aqueous extract produced by an acidic wash of alkali-washed naphthalene oil. Composed primarily of acid salts of various aromatic nitrogen bases including pyridine, quinoline and their alkyl derivatives.)	648-130-00-2	292-623-1	90641-00-2	J, M
Tar bases, quinoline derivs.; Distillate bases	648-131-00-8	271-020-7	68513-87-1	J, M
Tar bases, coal, quinoline derivs. fraction; Distillate bases	648-132-00-3	274-560-1	70321-67-4	J, M
Tar bases, coal, distn. residues; Distillate bases (The distillation residue remaining after the distillation of the neutralized, acid-extracted base-containing tar fractions obtained by the distillation of coal tars. It contains chiefly aniline, collidines, quinoline and quinoline derivatives and toluidines.)	648-132-00-9	274-544-0	92062-29-8	J, M
Hydrocarbon oils, arom., mixed with polyethylene and polypropylene, pyrolyzed, light oil fraction; Heat treatment products (The oil obtained from the heat treatment of a polyethylene/polypropylene mixture with coal tar pitch or aromatic oils. It consists predominantly of benzene and its homologs boiling in a range of approximately 70 °C to 120 °C (158 °F to 248 °F).)	648-134-00-4	309-745-9	100801-63-6	J, M
Hydrocarbon oils, arom., mixed with polyethylene, pyrolyzed, light oil fraction; Heat treatment products (The oil obtained from the heat treatment of polyethylene with coal tar pitch or aromatic oils. It consists predominantly of benzene and its homologs boiling in a range of 70 °C to 120 °C (158 °F to 248 °F).)	648-135-00-X	309-748-5	100801-65-8	J, M

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Substances	Index number	EC number	CAS number	Notes
Hydrocarbon oils, arom., mixed with polystyrene, pyrolyzed, light oil fraction; Heat treatment products (The oil obtained from the heat treatment of polystyrene with coal tar pitch or aromatic oils. It consists predominantly of benzene and its homologs boiling in a range of approximately 70 °C to 210 °C (158 °F to 410 °F).)	648-136-00-5	309-749-0	100801-66-9	J, M
Extract residues (coal), tar oil alk., naphthalene distn. residues; Naphthalene oil extract residue (The residue obtained from chemical oil extracted after the removal of naphthalene by distillation composed primarily of two to four membered condensed ring aromatic hydrocarbons and aromatic nitrogen bases.)	648-137-00-0	277-567-8	736665-18-6	J, M

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Creosote oil, low-boiling distillate; Wash oil (The low-boiling distillation fraction obtained from the high temperature carbonisation of bituminous coal, which is further refined to remove excess crystalline salts. It consists primarily of creosote oil with some of the normal polynuclear aromatic salts, which are components of coal tar distillate, removed. It is crystal free at approximately 38 °C.)	648-138-00-6	274-566-4	70321-80-1	H

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Tar acids, cresylic, sodium salts, caustic solns.; Alkaline extract	648-139-00-1	272-361-4	68815-21-4	J, M
Extract oils (coal), tar base; Acid extract (The extract from coal tar oil alkaline extract residue produced by an acidic wash such as aqueous sulfuric acid after distillation to remove naphthalene. Composed primarily of the acid salts of various aromatic nitrogen bases including pyridine, quinoline, and their alkyl derivatives.)	648-140-00-7	266-020-9	65996-86-3	J, M
Tar bases, coal, crude; Crude tar bases (The reaction product obtained by neutralizing coal tar base extract oil with an alkaline	648-141-00-2	266-018-8	65996-84-1	J, M

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Substances	Index number	EC number	CAS number	Notes
solution, such as aqueous sodium hydroxide, to obtain the free bases. Composed primarily of such organic bases as acridine, phenanthridine, pyridine, quinoline and their alkyl derivatives.)				
Residues (coal), liq. solvent extn.; (A cohesive powder composed of coal mineral matter and undissolved coal remaining after extraction of coal by a liquid solvent.)	648-142-00-8	302-681-2	94114-46-2	M
Coal liquids, liq. solvent extn. soln.; (The product obtained by filtration of coal mineral matter and undissolved coal from coal extract solution produced by digesting coal in a liquid solvent. A black, viscous, highly complex liquid combination composed primarily of aromatic and partly hydrogenated aromatic hydrocarbons, aromatic nitrogen compounds, aromatic sulfur compounds, phenolic and other aromatic oxygen compounds and their alkyl derivatives.)	648-143-00-3	302-682-8	94114-47-3	M
Coal liquids, liq. solvent extn.; (The substantially solvent-free product obtained by the distillation of the solvent from filtered coal extract solution produced by digesting coal in a liquid solvent. A black semi-solid, composed primarily of a complex combination of condensed-ring aromatic hydrocarbons, aromatic nitrogen compounds, aromatic sulfur compounds, phenolic compounds and other aromatic oxygen compounds, and their alkyl derivatives.)	648-144-00-9	302-683-3	94114-48-4	M
Light oil (coal), coke-oven; Crude benzole (The volatile organic liquid extracted from the gas evolved in the high temperature (greater than 700 °C (1292 °F)) destructive distillation of coal. Composed primarily of benzene, toluene, and xylenes. May contain other minor hydrocarbon constituents.)	648-147-00-5	266-012-5	65996-78-3	J
Distillates (coal), liq. solvent extn., primary; (The liquid product of condensation of vapours emitted	648-148-00-0	302-688-0	94114-52-0	J

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during the digestion of coal in a liquid solvent and boiling in the range of approximately 30 °C to 300 °C (86 °F to 572 °F). Composed primarily of partly hydrogenated condensed-ring aromatic hydrocarbons, aromatic compounds containing nitrogen, oxygen and sulfur, and their alkyl derivatives having carbon numbers predominantly in the range of C_4 through C_{14}.)				
Distillates (coal), solvent extn., hydrocracked; (Distillate obtained by hydrocracking of coal extract or solution produced by the liquid solvent extraction or supercritical gas extraction process and boiling in the range of approximately 30 °C to 300 °C (86 °F to 572 °F). Composed primarily of aromatic, hydrogenated aromatic and naphthenic compounds, their alkyl derivatives and alkanes with carbon numbers predominantly in the range of C_4 through C_{14}. Nitrogen, sulfur and oxygen-containing aromatic and hydrogenated aromatic compounds are also present.)	648-149-00-6	302-689-6	94114-53-1	J
Naphtha (coal), solvent extn., hydrocracked; (Fraction of the distillate obtained by hydrocracking of coal extract or solution produced by the liquid solvent extraction or supercritical gas extraction processes and boiling in the range of approximately 30 °C to 180 °C (86 °F to 356 °F). Composed primarily of aromatic, hydrogenated aromatic and naphthenic compounds, their alkyl derivatives and alkanes with carbon numbers predominantly in the range of C_4 to C_9. Nitrogen, sulfur and oxygen-containing aromatic and hydrogenated aromatic compounds are also present.)	648-150-00-1	302-690-1	94114-54-2	J
Gasoline, coal solvent extn., hydrocracked naphtha; (Motor fuel produced by the reforming of the refined naphtha fraction of the products of hydrocracking of coal extract or solution produced by the liquid solvent extraction or supercritical gas extraction processes and boiling in the range of approximately 30 °C	648-151-00-7	302-691-7	94114-55-3	J

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Substances	Index number	EC number	CAS number	Notes
to 180 °C (86 °F to 356 °F). Composed primarily of aromatic and naphthenic hydrocarbons, their alkyl derivatives and alkyl hydrocarbons having carbon numbers in the range of C_4 through C_9.)				
Distillates (coal), solvent extn., hydrocracked middle; (Distillate obtained from the hydrocracking of coal extract or solution produced by the liquid solvent extraction or supercritical gas extraction processes and boiling in the range of approximately 180 °C to 300 °C (356 °F to 572 °F). Composed primarily of two-ring aromatic, hydrogenated aromatic and naphthenic compounds, their alkyl derivatives and alkanes having carbon numbers predominantly in the range of C_9 through C_{14}. Nitrogen, sulfur and oxygen-containing compounds are also present.)	648-152-00-2	302-692-2	94114-56-4	J
Distillates (coal), solvent extn., hydrocracked hydrogenated middle; (Distillate from the hydrogenation of hydrocracked middle distillate from coal extract or solution produced by the liquid solvent extraction or supercritical gas extraction processes and boiling in the range of approximately 180 °C to 280 °C (356 °F to 536 °F). Composed primarily of hydrogenated two-ring carbon compounds and their alkyl derivatives having carbon numbers predominantly in the range of C_9 through C_{14}.)	648-153-00-8	302-693-8	94114-57-5	J
Light oil (coal), semi-coking process; Fresh oil (The volatile organic liquid condensed from the gas evolved in the low temperature (less than 700 °C (1292 °F)) destructive distillation of coal. Composed primarily of C_{6-10} hydrocarbons.)	648-156-00-4	292-635-7	90641-11-5	J

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Extracts (petroleum), light naphthenic distillate solvent	649-001-00-3	265-102-1	64742-03-6	H
Extracts (petroleum), heavy paraffinic distillate solvent	649-002-00-9	265-103-7	64742-04-7	H
Extracts (petroleum), light paraffinic distillate solvent	649-003-00-4	265-104-2	6472-05-8	H

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Substances	Index number	EC number	CAS number	Notes
Extracts (petroleum), heavy naphthenic distillate solvent	649-004-00-X	265-111-0	64742-11-6	H
Extracts (petroleum), light vacuum gas oil solvent	649-005-00-5	295-341-7	91995-78-7	H
Hydrocarbons C_{26-55}, aromatic-rich	649-006-00-0	307-753-7	97722-04-8	H

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Residues (petroleum), atm. tower; Heavy fuel oil (A complex residuum from the atmospheric distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly greater than C_{20} and boiling above approximately 350 °C (662 °F). This stream is likely to contain 5 wt. % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.)	649-008-00-1	265-045-2	64741-45-3	
Gas oils (petroleum), heavy vacuum; Heavy fuel oil (A complex combination of hydrocarbons produced by the vacuum distillation of the residuum from atmospheric distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50} and boiling in the range of approximately 350 °C to 600 °C (662 °F to 1112 °F). This stream is likely to contain 5 wt. % more of 4- to 6-membered condensed ring aromatic hydrocarbons.)	649-009-00-7	265-058-3	64741-57-7	
Distillates (petroleum), heavy catalytic cracked; Heavy fuel oil (A complex combination of hydrocarbons produced by the distillation of products from a catalytic cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{35} and boiling in the range of approximately 260 °C to 500 °C (500 °F to 932 °F). This stream is likely to contain 5 wt. % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.)	649-010-00-2	265-063-0	64741-61-3	
Clarified oils (petroleum), catalytic cracked; Heavy fuel oil (A complex combination of hydrocarbons produced as the residual fraction from distillation of the products from a catalytic cracking process. It consists of	649-011-00-8	265-064-6	64741-62-4	

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Substances	Index number	EC number	CAS number	Notes
hydrocarbons having carbon numbers predominantly greater than C_{20} and boiling above approximately 350 °C (662 °F). This stream is likely to contain 5 wt. % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.)				
Residues (petroleum), hydrocracked; Heavy fuel oil (A complex combination of hydrocarbons produced as the residual fraction from distillation of the products of a hydrocracking process. It consists of hydrocarbons having carbon numbers predominantly greater than C_{20} and boiling above approximately 350 °C (662 °F).)	649-012-00-3	265-076-1	64741-75-9	
Residues (petroleum), thermal cracked; Heavy fuel oil (A complex combination of hydrocarbons produced as the residual fraction from distillation of the product from a thermal cracking process. It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly greater than C_{20} and boiling above approximately 350 °C (662 °F). This stream is likely to contain 5 wt. % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.)	649-013-00-9	265-081-9	64741-80-6	
Distillates (petroleum), heavy thermal cracked; Heavy fuel oil (A complex combination of hydrocarbons from the distillation of the products from a thermal cracking process. It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{36} and boiling in the range of approximately 260 °C to 480 °C (500 °F to 896 °F). This stream is likely to contain 5 wt. % or more or 4- to 6-membered condensed ring aromatic hydrocarbons.)	649-014-00-4	265-082-4	64741-81-7	
Gas oils (petroleum), hydrotreated vacuum; Heavy fuel oil (A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{13} through C_{50} and boiling in the range of approxi-	649-015-00-X	265-162-9	64742-59-2	

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Substances	Index number	EC number	CAS number	Notes
mately 230 °C to 600 °C (446 °F to 1112 °F). This stream is likely to contain 5 wt. % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.)				
Residues (petroleum) hydrodesulfurized atmospheric tower; Heavy fuel oil (A complex combination of hydrocarbons obtained by treating an atmospheric tower residuum with hydrogen in the presence of a catalyst under conditions primarily to remove organic sulfur compounds. It consists of hydrocarbons having carbon numbers predominantly greater than C_{20} and boiling above approximately 350 °C (662 °F). This stream is likely to contain 5 wt. % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.)	649-016-00-5	265-181-2	64742-78-5	
Gas oils (petroleum), hydrodesulfurized heavy vacuum; Heavy fuel oil (A complex combination of hydrocarbons obtained from a catalytic hydrodesulfurization process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50} and boiling in the range of approximately 350 °C to 600 °C (662 °F to 1112 °F). This stream is likely to contain 5 wt. % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.)	649-017-00-0	265-189-6	64742-86-5	
Residues (petroleum), steam-cracked; Heavy fuel oil (A complex combination of hydrocarbons obtained as the residual fraction from the distillation of the products of a steam cracking process (including steam cracking to produce ethylene). It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly greater than C_{14} and boiling above approximately 260 °C (500 °F). This stream is likely to contain 5 wt. % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.)	649-018-00-6	265-193-8	64742-90-1	
Residues (petroleum), atmospheric; Heavy fuel oil (A complex residuum from atmospheric distillation of	649-019-00-1	269-777-3	68333-22-2	

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Substances	Index number	EC number	CAS number	Notes
crude oil. It consists of hydrocarbons having carbon numbers predominantly greater than C_{11} and boiling above approximately 200 °C (392 °F). This stream is likely to contain 5 wt. % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.)				
Clarified oils (petroleum), hydrodesulfurized catalytic cracked; Heavy fuel oil (A complex combination of hydrocarbons obtained by treating catalytic cracked clarified oil with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly greater than C_{20} and boiling above approximately 350 °C (662 °F). This stream is likely to contain 5 wt. % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.)	649-020-00-7	269-782-0	68333-26-6	
Distillates (petroleum), hydrodesulfurized intermediate catalytic cracked; Heavy fuel oil (A complex combination of hydrocarbons obtained by treating intermediate catalytic cracked distillates with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{11} through C_{30} and boiling in the range of approximately 205 °C to 450 °C (401 °F to 842 °F). It contains a relatively large proportion of tricyclic aromatic hydrocarbons.)	649-021-00-2	269-783-6	68333-27-7	
Distillates (petroleum), hydrodesulfurized heavy catalytic cracked; Heavy fuel oil (A complex combination of hydrocarbons obtained by treatment of heavy catalytic cracked distillates with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{35} and boiling in the range of approximately 260 °C to 500 °C (500 °F to 932 °F). This stream is likely to contain 5 wt. % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.)	649-022-00-8	269-784-1	68333-28-8	

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Substances	Index number	EC number	CAS number	Notes
Fuel oil, residues-straight-run gas oils, high-sulfur; Heavy fuel oil	649-023-00-3	270-674-0	68476-32-4	
Fuel oil, residual; Heavy fuel oil (The liquid product from various refinery streams, usually residues. The composition is complex and varies with the source of the crude oil.)	649-024-00-9	270-675-6	68476-33-5	
Residues (petroleum), catalytic reformer fractionator residue distn.; Heavy fuel oil (A complex residuum from the distillation of catalytic reformer fractionator residue. It boils above approximately 399 °C (750 °F).)	649-025-00-4	270-792-2	68478-13-7	
Residues (petroleum), heavy coker gas oil and vacuum gas oil; Heavy fuel oil (A complex combination of hydrocarbons produced as the residual fraction from the distillation of heavy coker gas oil and vacuum gas oil. It predominantly consists of hydrocarbons having carbon numbers predominantly greater than C_{13} and boiling above approximately 230 °C (446 °F).)	649-026-00-X	270-796-4	68478-17-1	
Residues (petroleum), heavy coker and light vacuum; Heavy fuel oil (A complex combination of hydrocarbons produced as the residual fraction from the distillation of heavy coker gas oil and light vacuum gas oil. It consists predominantly of hydrocarbons having carbon numbers predominantly greater than C_{13} and boiling above approximately 230 °C (446 °F).)	649-027-00-5	270-983-0	68512-61-8	
Residues (petroleum), light vacuum; Heavy fuel oil (A complex residuum from the vacuum distillation of the residuum from the atmospheric distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly greater than C_{13} and boiling above approximately 230 °C (446 °F).)	649-028-00-0	270-984-6	68512-62-9	
Residues (petroleum), steam-cracked light; Heavy fuel oil (A complex residuum from the distillation of the products from a steam-cracking process. It consists predominantly of	649-029-00-6	271-013-9	68513-69-9	

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Substances	Index number	EC number	CAS number	Notes
aromatic and unsaturated hydrocarbons having carbon numbers greater than C_7 and boiling in the range of approximately 101 °C to 555 °C (214 °F to 1030 °F).)				
Fuel oil, No 6; Heavy fuel oil (A distillate oil having a minimum viscosity of 900 SUS at 37,7 °C (100 °F) to a maximum of 9000 SUS at 37,7 °C (100 °F).)	649-030-00-1	271-384-7	68553-00-4	
Residues (petroleum), topping plant, low-sulfur; Heavy fuel oil (A low-sulfur complex combination of hydrocarbons produced as the residual fraction from the topping plant distillation of crude oil. It is the residuum after the straight-run gasoline cut, kerosene cut and gas oil cut have been removed.)	649-031-00-7	271-763-7	68607-30-7	
Gas oils (petroleum), heavy atmospheric; Heavy fuel oil (A complex combination of hydrocarbons obtained by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_7 through C_{35} and boiling in the range of approximately 121 °C to 510 °C (250 °F to 950 °F).)	649-032-00-2	272-184-2	68783-08-4	
Residues (petroleum), coker scrubber, Condensed-ring-arom.-contg.; Heavy fuel oil (A very complex combination of hydrocarbons produced as the residual fraction from the distillation of vacuum residuum and the products from a thermal cracking process. It consists predominantly of hydrocarbons having carbon numbers predominantly greater than C_{20} and boiling above approximately 350 °C (662 °F). This stream is likely to contain 5 wt. % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.)	649-033-00-8	272-187-9	68783-13-1	
Distillates (petroleum), petroleum residues vacuum; Heavy fuel oil (A complex combination of hydrocarbons produced by the vacuum distillation of the residuum from the atmospheric distillation of crude oil.)	649-034-00-3	273-263-4	68955-27-1	

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Substances	Index number	EC number	CAS number	Notes
Residues (petroleum), steam-cracked, resinous; Heavy fuel oil (A complex residuum from the distillation of steam-cracked petroleum residues.)	649-035-00-9	273-272-3	68955-36-2	
Distillates (petroleum), intermediate vacuum; Heavy fuel oil (A complex combination of hydrocarbons produced by the vacuum distillation of the residuum from atmospheric distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{14} through C_{42} and boiling in the range of approximately 250 °C to 545 °C (482 °F to 1013 °F). This stream is likely to contain 5 wt. % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.)	649-036-00-4	274-683-0	70592-76-6	
Distillates (petroleum), light vacuum; Heavy fuel oil (A complex combination of hydrocarbons produced by the vacuum distillation of the residuum from atmospheric distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{11} through C_{35} and boiling in the range of approximately 250 °C to 545 °C (482 °F to 1013 °F).)	649-037-00-X	247-684-6	70592-77-7	
Distillates (petroleum), vacuum; Heavy fuel oil (A complex combination of hydrocarbons produced by the vacuum distillation of the residuum from atmospheric distillation of crude oil. It consists of hydrocarbons having numbers predominantly in the range of C_{15} through C_{50} and boiling in the range of approximately 270 °C to 600 °C (518 °F to 1112 °F). This stream is likely to contain 5 wt. % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.)	649-038-00-5	274-685-1	70592-78-8	
Gas oils (petroleum), hydrodesulphurized coker heavy vacuum; Heavy fuel oil (A complex combination of hydrocarbons obtained by hydrodesulphurization of heavy coker distillate stocks. It consists predominantly of hydrocarbons having carbon numbers predominantly in the	649-039-00-0	285-555-9	85117-03-9	

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Substances	Index number	EC number	CAS number	Notes
range C_{18} to C_{44} and boiling in the range of approximately 304 °C to 548 °C (579 °F to 1018 °F). Likely to contain 5 % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.)				
Residues (petroleum), steam-cracked, distillates; Heavy fuel oil (A complex combination of hydrocarbons obtained during the production of refined petroleum tar by the distillation of steam cracked tar. It consists predominantly of aromatic and other hydrocarbons and organic sulfur compounds.)	649-040-00-6	292-657-7	90669-75-3	
Residues (petroleum), vacuum, light; Heavy fuel oil (A complex residuum from the vacuum distillation of the residuum from atmospheric distillation of crude oil. It consists predominantly of hydrocarbons having carbon numbers predominantly greater than C_{24} and boiling above approximately 390 °C (734 °F).)	649-041-00-1	292-658-2	90669-76-4	
Fuel oil, heavy, high-sulphur; Heavy fuel oil (A complex combination of hydrocarbons obtained by the distillation of crude petroleum. It consists predominantly of aliphatic, aromatic and cycloaliphatic hydrocarbons having carbon numbers predominantly higher than C_{25} and boiling above approximately 400 °C (752 °F).)	649-042-00-7	295-396-7	92045-14-2	
Residues (petroleum), catalytic cracking; Heavy fuel oil (A complex combination of hydrocarbons produced as the residual fraction from the distillation of the products from a catalytic cracking process. It consists predominantly of hydrocarbons having carbon numbers predominantly greater than C_{11} and boiling above approximately 200 °C (392 °F).)	649-043-00-2	295-511-0	92061-97-7	
Distillates (petroleum), intermediate catalytic cracked, thermally degraded; Heavy fuel oil (A complex combination of hydrocarbons produced by the distillation of products from a catalytic cracking process	649-044-00-8	295-990-6	92201-59-7	

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Substances	Index number	EC number	CAS number	Notes
which has been used as a heat transfer fluid. It consists predominantly of hydrocarbons boiling in the range of approximately 220 °C to 450 °C (428 °F to 842 °F). This stream is likely to contain organic sulfur compounds.)				
Residual oils (petroleum); Heavy fuel oil (A complex combination of hydrocarbons, sulfur compounds and metal-containing organic compounds obtained as the residue from refinery fractionation cracking processes. It produces a finished oil with a viscosity above 2 cSt. at 100 °C.)	649-045-00-3	298-754-0	93821-66-0	
Residues, steam cracked, thermally treated; Heavy fuel oil (A complex combination of hydrocarbons obtained by the treatment and distillation of raw steam-cracked naphtha. It consists predominantly of unsaturated hydrocarbons boiling in the range above approximately 180 °C (356 °F).)	649-046-00-9	308-733-0	98219-64-8	
Distillates (petroleum), hydrodesulphurized full-range middle; Heavy fuel oil (A complex combination of hydrocarbons obtained by treating a petroleum stock with hydrogen. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_9 through C_{25} and boiling in the range of approximately 150 °C to 400 °C (302 °F to 752 °F).)	649-047-00-4	309-863-0	101316-57-8	
Residues (petroleum), catalytic reformer fractionator; Heavy fuel oil (A complex combination of hydrocarbons produced as the residual fraction from distillation of the product from a catalytic reforming process. It consists of predominantly aromatic hydrocarbons having carbon numbers predominantly in the range of C_{10} through C_{25} and boiling in the range of approximately 160 °C to 400 °C (320 °F to 725 °F). This stream is likely to contain 5 wt. % or more of 4- or 6-membered condensed ring aromatic hydrocarbons.)	649-048-00-X	265-069-3	64741-67-9	

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Petroleum; Crude oil (A complex combination of hydrocarbons. It consists predominantly of aliphatic, alicyclic and aromatic hydrocarbons. It may also contain small amounts of nitrogen, oxygen and sulfur compounds. This category encompasses light, medium, and heavy petroleums, as well as the oils extended from tar sands. Hydrocarbonaceous materials requiring major chemical changes for their recovery or conversion to petroleum refinery feedstocks such as crude shale oils; upgraded shale oils and liquid coal fuels are not included in this definition.)	649-049-00-5	232-298-5	8002-05-9	
▼M45 _____				
▼M23 Hydrocarbons, C_4, 1,3-butadiene-and isobutene-free; Petroleum gas	649-118-00-X	306-004-1	95465-89-7	K
▼M45 _____				
▼M23 Foots oil (petroleum), acid-treated; Foots oil (A complex combination of hydrocarbons obtained by treatment of Foot's oil with sulphuric acid. It consists predominantly of branched-chain hydrocarbons with carbon numbers predominantly in the range of C_{20} through C_{50}.)	649-175-00-0	300-225-7	93924-31-3	L
Foots oil (petroleum), clay-treated; Foots oil (A complex combination of hydrocarbons obtained by treatment of Foot's oil with natural or modified clay in either a contacting or percolation process to remove the trace amounts of polar compounds and impurities present. It consists predominantly of branched chain hydrocarbons with carbon numbers predominantly in the range of C_{20} through C_{50}.)	649-176-00-6	300-226-2	93924-32-4	L
▼M45 _____				

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Substances	Index number	EC number	CAS number	Notes
Foots oil (petroleum), carbon-treated; Foot's oil (A complex combination of hydrocarbons obtained by the treatment of Foot's oil with activated carbon for the removal of trace constituents and impurities. It consists predominantly of saturated straight chain hydrocarbons having carbon numbers predominantly greater than C_{12}.)	649-211-00-5	308-126-0	97862-76-5	L
Distillates (petroleum), sweetened middle; Gas oil — unspecified (A complex combination of hydrocarbons obtained by subjecting a petroleum distillate to a sweetening process to convert mercaptans or to remove acidic impurities. It consists of hydrocarbons having carbon numbers predominantly in the range of C_9 through C_{20} and boiling in the range of approximately 150 °C to 345 °C (302 °F to 653 °F).)	649-212-00-0	265-088-7	64741-86-2	N
Gas oils (petroleum), solvent-refined; Gas oil — unspecified (A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominantly of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_{11} through C_{25} and boiling in the range of approximately 205 °C to 400 °C (401 °F to 752 °F).)	649-213-00-6	265-092-9	64741-90-8	N
Distillates (petroleum), solvent-refined middle; Gas oil — unspecified (A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominantly of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_9 through C_{20} and boiling in the range of approximately 150 °C to 345 °C (302 °F to 653 °F).)	649-214-00-1	265-093-4	64741-91-9	N
Gas oils (petroleum), acid-treated; Gas oil — unspecified (A complex combination of hydrocarbons obtained as a raffinate from a sulphuric acid treating process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{13} through C_{25} and	649-215-00-7	265-112-6	64742-12-7	N

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Substances	Index number	EC number	CAS number	Notes
boiling in the range of approximately 230 °C to 400 °C (446 °F to 752 °F).)				
Distillates (petroleum), acid-treated middle; Gas oil — unspecified (A complex combination of hydrocarbons obtained as a raffinate from a sulphuric acid treating process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{11} through C_{20} and boiling in the range of approximately 205 °C to 345 °C (401 °F to 653 °F).)	649-216-00-2	265-113-1	64742-13-8	N
Distillates (petroleum), acid-treated light; Gas oil — unspecified (A complex combination of hydrocarbons obtained as a raffinate from a sulphuric acid treating process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_9 through C_{16} and boiling in the range of approximately 150 °C to 290 °C (302 °F to 554 °F).)	649-217-00-8	265-114-7	64742-14-9	N
Gas oils (petroleum), chemically neutralized; Gas oil — unspecified (A complex combination of hydrocarbons produced by a treating process to remove acidic materials. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{13} through C_{25} and boiling in the range of approximately 230 °C to 400 °C (446 °F to 752 °F.)	649-218-00-3	265-129-9	64742-29-6	N
Distillates (petroleum), chemically neutralized middle; Gas oil — unspecified (A complex combination of hydrocarbons produced by a treating process to remove acidic materials. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{11} through C_{20} and boiling in the range of approximately 205 °C to 345 °C (401 °F to 653 °F).)	649-219-00-9	265-130-4	64742-30-9	N
Distillates (petroleum), clay-treated middle; Gas oil — unspecified (A complex combination of hydrocarbons resulting from treatment of a petroleum	649-220-00-4	265-139-3	64742-38-7	N

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Substances	Index number	EC number	CAS number	Notes
fraction with natural or modified clay, usually in a percolation process to remove the trace amounts of polar compounds and impurities present. It consists of hydrocarbons having carbon numbers predominantly in the range of C_9 through C_{20} and boiling in the range of approximately 150 °C to 345 °C (302 °F to 653 °F).)				
Distillates (petroleum), hydrotreated middle; Gas oil — unspecified (A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{11} through C_{25} and boiling in the range of approximately 205 °C to 400 °C (401 °F to 752 °F).)	649-221-00-X	265-148-2	64742-46-7	N
Gas oils (petroleum), hydrodesuphurized; Gas oil — unspecified (A complex combination of hydrocarbons obtained from a petroleum stock by treating with hydrogen to convert organic sulphur to hydrogen sulphide which is removed. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{13} through C_{25} and boiling in the range of approximately 230 °C to 400 °C (446 °F to 752 °F.)	649-222-00-5	265-182-8	64742-79-6	N
Distillates (petroleum), hydrodesulphurized middle; Gas oil — unspecified (A complex combination of hydrocarbons obtained from a petroleum stock by treating with hydrogen to convert organic sulphur to hydrogen sulphide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{11} through C_{25} and boiling in the range of approximately 205 °C to 400 °C (401 °F to 752 °F).)	649-223-00-0	265-183-3	64742-80-9	N
Distillates (petroleum), catalytic reformer fractionator residue, high-boiling; Gas oil — unspecified (A complex combination of hydrocarbons from the distillation of catalytic reformer fractionator residue. It boils in the	649-228-00-8	270-719-4	68477-29-2	N

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Substances	Index number	EC number	CAS number	Notes
range of approximately 343 °C to 399 °C (650 °F to 750 °F).)				
Distillates (petroleum), catalytic reformer fractionator residue, intermediate-boiling; Gas oil — unspecified (A complex combination of hydrocarbons from the distillation of catalytic reformer fractionator residue. It boils in the range of approximately 288 °C to 371 °C (550 °F to 700 °F).)	649-229-00-3	270-721-5	68477-30-5	N
Distillates (petroleum), catalytic reformer fractionator residue, low-boiling; Gas oil — unspecified (The complex combination of hydrocarbons from the distillation of catalytic reformer fractionator residue. It boils approximately below 288 °C (550 °F).)	649-230-00-9	270-722-0	68477-31-6	N
Distillates (petroleum), highly refined middle; Gas oil — unspecified (A complex combination of hydrocarbons obtained by the subjection of a petroleum fraction to several of the following steps: filtration, centrifugation, atmospheric distillation, vacuum distillation, acidification, neutralization and clay treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{10} through C_{20}.)	649-231-00-4	292-615-8	90640-93-0	N
Distillates (petroleum) catalytic reformer, heavy arom. conc.; Gas oil — unspecified (A complex combination of hydrocarbons obtained from the distillation of a catalytically reformed petroleum cut. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C_{10} through C_{16} and boiling in the range of approximately 200 °C to 300 °C (392 °F to 572 °F).)	649-232-00-X	295-294-2	91995-34-5	N
Gas oils, paraffinic; Gas oil — unspecified (A distillate obtained from the redistillation of a complex combination of hydrocarbons obtained by the distillation of the effluents from a severe catalytic hydrotreatment of paraffins. It boils in the range	649-233-00-5	300-227-8	93924-33-5	N

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Substances	Index number	EC number	CAS number	Notes
of approximately 190 °C to 330 °C (374 °F to 594 °F).)				
Naphtha (petroleum), solvent-refined hydrodesulphurized heavy; Gas oil — unspecified	649-234-00-0	307-035-3	97488-96-5	N
Hydrocarbons, C_{16-20}, hydrotreated middle distillate, distn. lights; Gas oil — unspecified (A complex combination of hydrocarbons obtained as first runnings from the vacuum distillation of effluents from the treatment of a middle distillate with hydrogen. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{16} through C_{20} and boiling in the range of approximately 290 °C to 350 °C (554 °F to 662 °F). It produces a finished oil having a viscosity of 2 cSt at 100 °C (212 °F).)	649-235-00-6	307-659-6	97675-85-9	N
Hydrocarbons, C_{12-20}, hydrotreated paraffinic, distn. lights; Gas oil — unspecified (A complex combination of hydrocarbons obtained as first runnings from the vacuum distillation of effluents from the treatment of heavy paraffins with hydrogen in the presence of a catalyst. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{12} through C_{20} and boiling in the range of approximately 230 °C to 350 °C (446 °F to 662 °F). It produces a finished oil having a viscosity of 2 cSt at 100 °C (212 °F).)	649-236-00-1	307-660-1	97675-86-0	N
Hydrocarbons, C_{11-17}, solvent-extd. light naphthenic; Gas oil — unspecified (A complex combination of hydrocarbons obtained by extraction of the aromatics from a light naphthenic distillate having a viscosity of 2.2 cSt at 40 °C (104 °F). It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{11} through C_{17} and boiling in the range of approximately 200 °C to 300 °C (392 °F to 572 °F).)	649-237-00-7	307-757-9	97722-08-2	N
Gas oils, hydrotreated; Gas oil — unspecified (A complex combination of hydrocarbons obtained from the	649-238-00-2	308-128-1	97862-78-7	N

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Substances	Index number	EC number	CAS number	Notes
redistillation of the effluents from the treatment of paraffins with hydrogen in the presence of a catalyst. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{17} through C_{27} and boiling in the range of approximately 330 °C to 340 °C (626 °F to 644 °F).)				
Distillates (petroleum), carbon-treated light paraffinic; Gas oil — unspecified (A complex combination of hydrocarbons obtained by the treatment of a petroleum oil fraction with activated charcoal for the removal of traces of polar constituents and impurities. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{12} through C_{28}.)	649-239-00-8	309-667-5	100683-97-4	N
Distillates (petroleum), intermediate paraffinic, carbon-treated; Gas oil — unspecified (A complex combination of hydrocarbons obtained by the treatment of petroleum with activated charcoal for the removal of trace polar constituents and impurities. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{16} through C_{36}.)	649-240-00-3	309-668-0	100683-98-5	N
Distillates (petroleum), intermediate paraffinic, clay-treated; Gas oil — unspecified (A complex combination of hydrocarbons obtained by the treatment of petroleum with bleaching earth for the removal of trace polar constituents and impurities. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{16} through C_{36}.)	649-241-00-9	309-669-6	100683-99-6	N
Alkanes, C_{12-26}-branched and linear;	649-242-00-4	292-454-3	90622-53-0	N
Lubricating greases; Grease (A complex combination of hydrocarbons having carbon numbers predominantly in the range of C_{12} through C_{50}. May contain organic salts of alkali metals, alkaline earth metals, and/or aluminium compounds.)	649-243-00-X	278-011-7	74869-21-9	N

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Substances	Index number	EC number	CAS number	Notes
Slack wax (petroleum); Slack wax (A complex combination of hydrocarbons obtained from a petroleum fraction by solvent crystallization (solvent dewaxing) or as a distillation fraction from a very waxy crude. It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than C_{20}.)	649-244-00-5	265-165-5	64742-61-6	N
Slack wax (petroleum), acid-treated; Slack wax (A complex combination of hydrocarbons obtained as a raffinate by treatment of a petroleum slack wax fraction with sulphuric acid treating process. It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than C_{20}.)	649-245-00-0	292-659-8	90669-77-5	N
Slack wax (petroleum), clay-treated; Slack wax (A complex combination of hydrocarbons obtained by treatment of a petroleum slack wax fraction with natural or modified clay in either a contacting or percolation process. It consists predominantly of saturated straight and branched hydrocarbons having carbon numbers predominantly greater than C_{20}.)	649-246-00-6	292-660-3	90669-78-6	N
Slack wax (petroleum), hydro-treated; Slack wax (A complex combination of hydrocarbons obtained by treating slack wax with hydrogen in the presence of a catalyst. It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than C_{20}.)	649-247-00-1	295-523-6	92062-09-4	N
Slack wax (petroleum), low-melting; Slack wax (A complex combination of hydrocarbons obtained from a petroleum fraction by solvent deparaffination. It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than C_{12}.)	649-248-00-7	295-524-1	92062-10-7	N

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Substances	Index number	EC number	CAS number	Notes
Slack wax (petroleum), low-melting, hydrotreated; Slack wax (A complex combination of hydrocarbons obtained by treatment of low-melting petroleum slack wax with hydrogen in the presence of a catalyst. It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than C_{12}.)	649-249-00-2	295-525-7	92062-11-8	N
Slack wax (petroleum), low-melting, carbon-treated; Slack wax (A complex combination of hydrocarbons obtained by the treatment of low-melting slack wax with activated carbon for the removal of trace polar constituents and impurities. It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than C_{12}.)	649-250-00-8	308-155-9	97863-04-2	N
Slack wax (petroleum), low-melting, clay-treated; Slack wax (A complex combination of hydrocarbons obtained by the treatment of low-melting petroleum slack wax with bentonite for removal of trace polar constituents and impurities. It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than C_{12}.)	649-251-00-3	308-156-4	97863-05-3	N
Slack wax (petroleum), low-melting, silicic acid-treated; Slack wax (A complex combination of hydrocarbons obtained by the treatment of low-melting petroleum slack wax with silicic acid for the removal of trace polar constituents and impurities. It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than C_{12}.)	649-252-00-9	308-158-5	97863-06-4	N
Slack wax (petroleum), carbon-treated; Slack wax (A complex combination of hydrocarbons obtained by treatment of petroleum slack wax with activated charcoal for the removal of trace polar constituents and impurities.)	649-253-00-4	309-723-9	100684-49-9	N

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Substances	Index number	EC number	CAS number	Notes
Petrolatum; Petrolatum (A complex combination of hydrocarbons obtained as a semi-solid from dewaxing paraffinic residual oil. It consists predominantly of saturated crystalline and liquid hydrocarbons having carbon numbers predominantly greater than C_{25}.)	649-254-00-X	232-373-2	8009-03-8	N
Petrolatum (petroleum), oxidized; Petrolatum (A complex combination of organic compounds, predominantly high molecular weight carboxylic acids, obtained by the air oxidation of petrolatum.)	649-255-00-5	265-206-7	64743-01-7	N
Petrolatum (petroleum), alumina-treated; Petrolatum (A complex combination of hydrocarbons obtained when petrolatum is treated with Al_2O_3 to remove polar components and impurities. It consists predominantly of saturated, crystalline, and liquid hydrocarbons having carbon numbers predominantly greater than C_{25}.)	649-256-00-0	285-098-5	85029-74-9	N
Petrolatum (petroleum), hydrotreated; Petrolatum (A complex combination of hydrocarbons obtained as a semi-solid from dewaxed paraffinic residual oil treated with hydrogen in the presence of a catalyst. It consists predominantly of saturated, microcrystalline, and liquid hydrocarbons having carbon numbers predominantly greater than C_{20}.)	649-257-00-6	295-459-9	92045-77-7	N
Petrolatum (petroleum), carbon-treated; Petrolatum (A complex combination of hydrocarbons obtained by the treatment of petroleum petrolatum with activated carbon for the removal of trace polar consituents and impurities. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly greater than C_{20}.)	649-258-00-1	308-149-6	97862-97-0	N
Petrolatum (petroleum), silicic acid-treated; Petrolatum (A complex combination of hydrocarbons obtained by the treatment of petroleum petrolatum with silicic acid for the removal of trace polar constituents and impurities. It consists predominantly of	649-259-00-7	308-150-1	97862-98-1	N

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Substances	Index number	EC number	CAS number	Notes
saturated hydrocarbons having carbon numbers predominantly greater than C_{20}.)				
Petrolatum (petroleum), clay-treated; Petrolatum (A complex combination of hydrocarbons obtained by treatment of petrolatum with bleaching earth for the removal of traces of polar constituents and impurities. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of greater than C_{25}.)	649-260-00-2	309-706-6	100684-33-1	N
Gasoline, natural; Low boiling point naphtha (A complex combination of hydrocarbons separated from natural gas by processes such as refrigeration or absorption. It consists predominantly of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_4 through C_8 and boiling in the range of approximately -20 °C to 120 °C (-4 °F to 248 °F).)	649-261-00-8	232-349-1	8006-61-9	P
Naphtha; Low boiling point naphtha (Refined, partly refined, or unrefined petroleum products by the distillation of natural gas. It consists of hydrocarbons having carbon numbers predominantly in the range of C_5 through C_6 and boiling in the range of approximately 100 °C to 200 °C (212 °F to 392 °F).)	649-262-00-3	232-443-2	8030-30-6	P
Ligroine; Low boiling point naphtha (A complex combination of hydrocarbons obtained by the fractional distillation of petroleum. This fraction boils in a range of approximately 20 °C to 135 °C (58 °F to 275 °F).)	649-263-00-9	232-453-7	8032-32-4	P
Naphtha (petroleum), heavy straight-run; Low boiling point naphtha (A complex combination of hydrocarbons produced by distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_6 through C_{12} and boiling in the range of approximately 65 °C to 230 °C (149 °F to 446 °F).)	649-264-00-4	265-041-0	64741-41-9	P

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Substances	Index number	EC number	CAS number	Notes
Naphtha (petroleum), full-range straight-run; Low boiling point naphtha (A complex combination of hydrocarbons produced by distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_4 through C_{11} and boiling in the range of approximately -20 °C to 220 °C (-4 °F to 428 °F).)	649-265-00-X	265-042-6	64741-42-0	P
Naphtha (petroleum), light straight-run; Low boiling point naphtha (A complex combination of hydrocarbons produced by distillation of crude oil. It consists predominantly of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_4 through C_{10} and boiling in the range of approximately -20 °C to 180 °C (-4 °F to 356 °F).)	649-266-00-5	265-046-8	64741-46-4	P
Solvent naphtha (petroleum), light aliph.; Low boiling point naphtha (A complex combination of hydrocarbons obtained from the distillation of crude oil or natural gasoline. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of C_5 through C_{10} and boiling in the range of approximately 35 °C to 160 °C (95 °F to 320 °F).)	649-267-00-0	265-192-2	64742-89-8	P
Distillates (petroleum), straight-run light; Low boiling point naphtha (A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_2 through C_7 and boiling in the range of approximately -88 °C to 99 °C (-127 °F to 210 °F).)	649-268-00-6	270-077-5	68410-05-9	P
Gasoline, vapour-recovery; Low boiling point naphtha (A complex combination of hydrocarbons separated from the gases from vapour recovery systems by cooling. It consists of hydrocarbons having carbon numbers predominantly in the range of C_4 through C_{11} and boiling in the range of approximately -20 °C to 196 °C (-4 °F to 384 °F).)	649-269-00-1	271-025-4	68514-15-8	P

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Substances	Index number	EC number	CAS number	Notes
Gasoline, straight-run, topping-plant; Low boiling point naphtha (A complex combination of hydrocarbons produced from the topping plant by the distillation of crude oil. It boils in the range of approximately 36,1 °C to 193,3 °C (97 °F to 380 °F).)	649-270-00-7	271-727-0	68606-11-1	P
Naphtha (petroleum), unsweetened; Low boiling point naphtha (A complex combination of hydrocarbons produced from the distillation of naphtha streams from various refinery processes. It consists of hydrocarbons having carbon numbers predominantly in the range of C_5 through C_{12} and boiling in the range of approximately 0 °C to 230 °C (25 °F to 446 °F).)	649-271-00-2	272-186-3	68783-12-0	P
Distillates (petroleum), light straight-run gasoline fractionation stabilizer overheads; Low boiling point naphtha (A complex combination of hydrocarbons having carbon numbers predominantly in the range of C_3 through C_6.)	649-272-00-8	272-931-2	68921-08-4	P
Naphtha (petroleum), heavy straight run, arom.-contg.; Low boiling point naphtha (A complex combination of hydrocarbons obtained from a distillation process of crude petroleum. It consists predominantly of hydrocarbons having carbon numbers in the range of C_8 through C_{12} and boiling in the range of approximately 130 °C to 210 °C (266 °F to 410 °F).)	649-273-00-3	309-945-6	101631-20-3	P
Naphtha (petroleum), full-range alkylate; Low boiling point modified naphtha (A complex combination of hydrocarbons produced by distillation of the reaction products of isobutane with monoolefinic hydrocarbons usually ranging in carbon numbers from C_3 through C_5. It consists of predominantly branched chain saturated hydrocarbons having carbon numbers predominantly in the range of C_7 through C_{12} and boiling in the range of approximately 90 °C to 220 °C (194 °F to 428 °F).)	649-274-00-9	265-066-7	64741-64-6	P

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Substances	Index number	EC number	CAS number	Notes
Naphtha (petroleum), heavy alkylate; Low boiling point modified naphtha (A complex combination of hydrocarbons produced by distillation of the reaction products of isobutane with monoolefinic hydrocarbons usually ranging in carbon numbers from C_3 to C_5. It consists of predominantly branched chain saturated hydrocarbons having carbon numbers predominantly in the range of C_9 through C_{12} and boiling in the range of approximately 150 °C to 220 °C (302 °F to 428 °F).)	649-275-00-4	265-067-2	64741-65-7	P
Naphtha (petroleum), light alkylate; Low boiling point modified naphtha (A complex combination of hydrocarbons produced by distillation of the reaction products of isobutane with monoolefinic hydrocarbons usually ranging in carbon numbers from C_3 through C_5. It consists of predominantly branched chain saturated hydrocarbons having carbon numbers predominantly in the range of C_7 through C_{10} and boiling in the range of approximately 90 °C to 160 °C (194 °F to 320 °F).)	649-276-00-X	265-068-8	64741-66-8	P
Naphtha (petroleum), isomerization; Low boiling point modified naphtha (A complex combination of hydrocarbons obtained from catalytic isomerization of straight chain paraffinic C_4 through C_6 hydrocarbons. It consists predominantly of saturated hydrocarbons such as isobutane, isopentane, 2,2-dimethylbutane, 2-methylpentane, and 3-methylpentane.)	649-277-00-5	265-073-5	64741-70-4	P
Naphtha (petroleum), solvent-refined light; Low boiling point modified naphtha (A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominantly of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_5 through C_{11} and boiling in the range of approximately 35 °C to 190 °C (95 °F to 374 °F).)	649-278-00-0	265-086-6	64741-84-0	P

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Substances	Index number	EC number	CAS number	Notes
Naphtha (petroleum), solvent-refined heavy; Low boiling point modified naphtha (A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominantly of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_7 through C_{12} and boiling in the range of approximately 90 °C to 230 °C (194 °F to 446 °F).)	649-279-00-6	265-095-5	64741-92-0	P
Raffinates (petroleum), catalytic reformer ethylene glycol-water countercurrent exts.; Low boiling point modified naphtha (A complex combination of hydrocarbons obtained as the raffinate from the UDEX extraction process on the catalytic reformer stream. It consists of saturated hydrocarbons having carbon numbers predominantly in the range of C_6 through C_9.)	649-280-00-1	270-088-5	68410-71-9	P
Raffinates (petroleum), reformer, Lurgi unit-sepd.; Low boiling point modified naphtha (The complex combination of hydrocarbons obtained as a raffinate from a Lurgi separation unit. It consists predominantly of non-aromatic hydrocarbons with various small amounts of aromatic hydrocarbons having carbon numbers predominantly in the range of C_6 through C_8.)	649-281-00-7	270-349-3	68425-35-4	P
Naphtha (petroleum), full-range alkylate, butane-contg.; Low boiling point modified naphtha (A complex combination of hydrocarbons produced by the distillation of the reaction products of isobutane with monoolefinic hydrocarbons usually ranging in carbon numbers from C_3 through C_5. It consists of predominantly branched chain saturated hydrocarbons having carbon numbers predominantly in the range of C_7 through C_{12} with some butanes and boiling in the range of approximately 35 °C to 200 °C (95 °F to 428 °F).)	649-282-00-2	271-267-0	68527-27-5	P
Distillates (petroleum), naphtha steam cracking-derived, solvent-refined light hydrotreated; Low boiling point modified naphtha (A complex combination of hydrocarbons obtained as the	649-283-00-8	295-315-5	91995-53-8	P

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Substances	Index number	EC number	CAS number	Notes
raffinates from a solvent extraction process of hydrotreated light distillate from steam-cracked naphtha.)				
Naphtha (petroleum), C_{4-12}butane-alkylate, isooctane-rich; Low boiling point modified naphtha (A complex combination of hydrocarbons obtained by alkylation of butanes. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_4 through C_{12}, rich in isooctane, and boiling in the range of approximately 35 °C to 210 °C (95 °F to 410 °F).)	649-284-00-3	295-430-0	92045-49-3	P
Hydrocarbons, hydrotreated light naphtha distillates, solvent-refined; Low boiling point modified naphtha (A combination of hydrocarbons obtained from the distillation of hydrotreated naphtha followed by a solvent extraction and distillation process. It consists predominantly of saturated hydrocarbons boiling in the range of approximately 94 °C to 99 °C (201 °F to 210 °F.)	649-285-00-9	295-436-3	92045-55-1	P
Naphtha (petroleum), isomerization, C_6-fraction; Low boiling point modified naphtha (A complex combination of hydrocarbons obtained by distillation of a gasoline which has been catalytically isomerized. It consists predominantly of hexane isomers boiling in the range of approximately 60 °C to 66 °C (140 °F to 151 °F).)	649-286-00-4	295-440-5	92045-58-4	P
Hydrocarbons, C_{6-7}, naphtha-cracking, solvent-refined; Low boiling point modified naphtha (A complex combination of hydrocarbons obtained by the sorption of benzene from a catalytically fully hydrogenated benzene-rich hydrocarbon cut that was distillatively obtained from prehydrogenated cracked naphtha. It consists predominantly of paraffinic and naphthenic hydrocarbons having carbon numbers predominantly in the range of C_6 through C_7 and boiling in the range of approximately 70 °C to 100 °C (158 °F to 212 °F).)	649-287-00-X	295-446-8	92045-64-2	P

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Substances	Index number	EC number	CAS number	Notes
Hydrocarbons, C_6-rich, hydrotreated light naphtha distillates, solvent-refined; Low boiling point modified naphtha (A complex combination of hydrocarbons obtained by distillation of hydrotreated naphtha followed by solvent extraction. It consists predominantly of saturated hydrocarbons and boiling in the range of approximately 65 °C to 70 °C (149 °F to 158 °F).)	649-288-00-5	309-871-4	101316-67-0	P
Naphtha (petroleum), heavy catalytic cracked; Low boiling point cat-cracked naphtha (A complex combination of hydrocarbons produced by a distillation of products from a catalytic cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_6 through C_{12} and boiling in the range of approximately 65 °C to 230 °C (148 °F to 446 °F). It contains a relatively large proportion of unsaturated hydrocarbons.)	649-289-00-0	265-055-7	64741-54-4	P
Naphtha (petroleum), light catalytic cracked; Low boiling point cat-cracked naphtha (A complex combination of hydrocarbons produced by the distillation of products from a catalytic cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_4 through C_{11} and boiling in the range of approximately -20 °C to 190 °C (-4 °F to 374 °F). It contains a relatively large proportion of unsaturated hydrocarbons.)	649-290-00-6	265-056-2	64741-55-5	P
Hydrocarbons, $C_{3\text{-}11}$, catalytic cracker distillates; Low boiling point cat-cracked naphtha (A complex combination of hydrocarbons produced by the distillations of products from a catalytic cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_3 through C_{11} and boiling in a range approximately up to 204 °C (400 °F).)	649-291-00-1	270-686-6	68476-46-0	P
Naphtha (petroleum), catalytic cracked light distd.; Low boiling point cat-cracked naphtha (A complex combination of hydrocarbons produced by the	649-292-00-7	272-185-8	68783-09-5	P

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Substances	Index number	EC number	CAS number	Notes
distillation of products from a catalytic cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)				
Distillates (petroleum), naphtha steam cracking-derived, hydrotreated light arom.; Low boiling point cat-cracked naphtha. (A complex combination of hydrocarbons obtained by treating a light distillate from steam-cracked naphtha. It consists predominantly of aromatic hydrocarbons.)	649-293-00-2	295-311-3	91995-50-5	P
Naphtha (petroleum), heavy catalytic cracked, sweetened; Low boiling point cat-cracked naphtha (A complex combination of hydrocarbons obtained by subjecting a catalytic cracked petroleum distillate to a sweetening process to convert mercaptans or to remove acidic impurities. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_6 through C_{12} and boiling in the range of approximately 60 °C to 200 °C (140 °F to 392 °F).)	649-294-00-8	295-431-6	92045-50-6	P
Naphtha (petroleum), light catalytic cracked sweetened; Low boiling point cat-cracked naphtha (A complex combination of hydrocarbons obtained by subjecting naphtha from a catalytic cracking process to a sweetening process to convert mercaptans or to remove acidic impurities. It consists predominantly of hydrocarbons boiling in a range of approximately 35 °C to 210 °C (95 °F to 410 °F).)	649-295-00-3	295-441-0	92045-59-5	P
Hydrocarbons, C_{8-12}, catalytic-cracking, chem. neutralized; Low boiling point cat-cracked naphtha (A complex combination of hydrocarbons produced by the distillation of a cut from the catalytic cracking process, having undergone an alkaline washing. It consists predominantly of hydrocarbons having carbon numbers in the range of C_8 through C_{12} and boiling in the range of approximately	649-296-00-9	295-794-0	92128-94-4	P

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Substances	Index number	EC number	CAS number	Notes
130 °C to 210 °C (266 °F to 410 °F).)				
Hydrocarbons, C_{8-12}, catalytic cracker distillates; Low boiling point cat-cracked naphtha (A complex combination of hydrocarbons obtained by distillation of products from a catalytic cracking process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_8 through C_{12} and boiling in the range of approximately 140 °C to 210 °C (284 °F to 410 °F).)	649-297-00-4	309-974-4	101794-97-2	P
Hydrocarbons, C_{8-12}, catalytic cracking, chem. neutralized, sweetened; Low boiling point cat-cracked naphtha	649-298-00-X	309-987-5	101896-28-0	P
Naphtha (petroleum), light catalytic reformed; Low boiling point cat-reformed naphtha (A complex combination of hydrocarbons produced from the distillation of products from a catalytic reforming process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_5 through C_{11} and boiling in the range of approximately 35 °C to 190 °C (95 °F to 374 °F). It contains a relatively large proportion of aromatic and branched chain hydrocarbons. This stream may contain 10 vol. % or more benzene.)	649-299-00-5	265-065-1	64741-63-5	P
Naphtha (petroleum), heavy catalytic reformed; Low boiling point cat-reformed naphtha (A complex combination of hydrocarbons produced from the distillation of products from a catalytic reforming process. It consists of predominantly aromatic hydrocarbons having numbers predominantly in the range of C_7 through C_{12} and boiling in the range of approximately 90 °C to 230 °C (194 °F to 446 °F).)	649-300-00-9	265-070-9	64741-68-0	P
Distillates (petroleum), catalytic reformed depentanizer; Low boiling point cat-reformed naphtha (A complex combination of hydrocarbons from the distillation of products from a catalytic reforming process. It consists predominantly of aliphatic hydrocarbons having	649-301-00-4	270-660-4	68475-79-6	P

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Substances	Index number	EC number	CAS number	Notes
carbon numbers predominantly in the range of C_3 through C_6 and boiling in the range of approximately -49 °C to 63 °C (-57 °F to 145 °F).)				
Hydrocarbons, C_{2-6}, C_{6-8} catalytic reformer; Low boiling point cat-reformed naphtha	649-302-00-X	270-687-1	68476-47-1	P
Residues (petroleum), C_{6-8}catalytic reformer; Low boiling point cat-reformed naphtha (A complex residuum from the catalytic reforming of C_{6-8} feed. It consists of hydrocarbons having carbon numbers predominantly in the range of C_2 through C_6.)	649-303-00-5	270-794-3	68478-15-9	P
Naphtha (petroleum), light catalytic reformed, arom.-free; Low boiling point cat-reformed naphtha (A complex combination of hydrocarbons obtained from distillation of products from a catalytic reforming process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_5 through C_8 and boiling in the range of approximately 35 °C to 120 °C (95 °F to 248 °F). It contains a relatively large proportion of branched chain hydrocarbons with the aromatic components removed.)	649-304-00-0	270-993-5	68513-03-1	P
Distillates (petroleum), catalytic reformed straight-run naphtha overheads; Low boiling point cat-reformed naphtha (A complex combination of hydrocarbons obtained by the catalytic reforming of straight-run naphtha followed by the fractionation of the total effluent. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_2 throughC_6.)	649-305-00-6	271-008-1	68513-63-3	P
Petroleum products, hydrofiner-powerformer reformates; Low boiling point cat-reformed naphtha (The complex combination of hydrocarbons obtained in a hydrofiner-powerformer process and boiling in a range of approximately 27 °C to 210 °C (80 °F to 410 °F).)	649-306-00-1	271-058-4	68514-79-4	P

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Substances	Index number	EC number	CAS number	Notes
Naphtha (petroleum, full-range reformed; Low boiling point cat-reformed naphtha (A complex combination of hydrocarbons produced by the distillation of the products from a catalytic reforming process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_5 through C_{12} and boiling in the range of approximately 35 °C to 230 °C (95 °F to 446 °F).)	649-307-00-7	272-895-8	68919-37-9	P
Naphtha (petroleum), catalytic reformed; Low boiling point cat-reformed naphtha (A complex combination of hydrocarbons produced by the distillation of products from a catalytic reforming process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_4 through C_{12} and boiling in the range of approximately 30 °C to 220 °C (90 °F to 430 °F). It contains a relatively large proportion of aromatic and branched chain hydrocarbons. This stream may contain 10 vol. % or more benzene.)	649-308-00-2	273-271-8	68955-35-1	P
Distillates (petroleum), catalytic reformed hydrotreated light, C_{8-12} arom. fraction; Low boiling point cat-reformed naphtha (A complex combination of alkylbenzenes obtained by the catalytic reforming of petroleum naphtha. It consists predominantly of alkylbenzenes having carbon numbers predominantly in the range of C_8 through C_{10} and boiling in the range of approximately 160 °C to 180 °C (320 °F to 356 °F).)	649-309-00-8	285-509-8	85116-58-1	P
Aromatic hydrocarbons, C_8, catalytic reforming-derived; Low boiling point cat-reformed naphtha	649-310-00-3	295-279-0	91995-18-5	P
Aromatic hydrocarbons, C_{7-12}, C_8-rich; Low boiling point cat-reformed naphtha (A complex combination of hydrocarbons obtained by separation from the platformate-containing fraction. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C_7 through C_{12} (primarily C_8) and can contain nonaromatic hydrocarbons, both boiling in the range of approxi-	649-311-00-9	297-401-8	93571-75-6	P

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Substances	Index number	EC number	CAS number	Notes
mately 130 °C to 200 °C (266 °F to 392 °F).)				
Gasoline, C_{5-11}, high-octane stabilized reformed; Low boiling point cat-reformed naphtha (A complex high octane combination of hydrocarbons obtained by the catalytic dehydrogenation of a predominantly naphthenic naphtha. It consists predominantly of aromatics and non-aromatics having carbon numbers predominantly in the range of C_5 through C_{11} and boiling in the range of approximately 45 °C to 185 °C (113 °F to 365 °F).)	649-312-00-4	297-458-9	93572-29-3	P
Hydrocarbons, C_{7-12}, C_{9-}-arom.-rich, reforming heavy fraction; Low boiling point cat-reformed naphtha (A complex combination of hydrocarbons obtained by separation from the platformate-containing fraction. It consists predominantly of nonaromatic hydrocarbons having carbon numbers predominantly in the range of C_7 through C_{12} and boiling in the range of approximately 120 °C to 210 °C (248 °F to 380 °F) and C_9 and higher aromatic hydrocarbons.)	649-313-00-X	297-465-7	93572-35-1	P
Hydrocarbons, C_{5-11}, nonaroms.-rich, reforming light fraction; Low boiling point cat-reformed naphtha (A complex combination of hydrocarbons obtained by separation from the platformate-containing fraction. It consists predominantly of nonaromatic hydrocarbons having carbon numbers predominantly in the range of C_5 to C_{11} and boiling in the range of approximately 35 °C to 125 °C (94 °F to 257 °F), benzene and toluene.)	649-314-00-5	297-466-2	93572-36-2	P
Foots oil (petroleum), silicic acid-treated; Foots oil (A complex combination of hydrocarbons obtained by the treatment of Foots oil with silicic acid for removal of trace constituents and impurities. It consists predominantly of straight chain hydrocarbons having carbon numbers predominantly greater than C_{12}.)	649-315-00-0	308-127-6	97862-77-6	L

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Substances	Index number	EC number	CAS number	Notes
Naphtha (petroleum), light thermal cracked; Low boiling point thermally cracked naphtha (A complex combination of hydrocarbons from distillation of products from a thermal cracking process. It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly in the range of C_4 through C_8 and boiling in the range of approximately -10 °C to 130 °C (14 °F to 266 °F).)	649-316-00-6	265-075-6	64741-74-8	P
Naphtha (petroleum), heavy thermal cracked; Low boiling point thermally cracked naphtha (A complex combination of hydrocarbons from distillation of products from a thermal cracking process. It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly in the range of C_6 through C_{12} and boiling in the range of approximately 65 °C to 220 °C (148 °F to 428 °F).)	649-317-00-1	265-085-0	64741-83-9	P
Distillates (petroleum), heavy arom.; Low boiling point thermally cracked naphtha (The complex combination of hydrocarbons from the distillation of products from the thermal cracking of ethane and propane. This higher boiling fraction consists predominantly of C_5-C_7 aromatic hydrocarbons with some unsaturated aliphatic hydrocarbons having a carbon number predominantly of C_5. This stream may contain benzene.)	649-318-00-7	267-563-4	67891-79-6	P
Distillates (petroleum), light arom.; Low boiling point thermally cracked naphtha (The complex combination of hydrocarbons from the distillation of products from the thermal cracking of ethane and propane. This lower boiling fraction consists predominantly of C_5-C_7 aromatic hydrocarbons with some unsaturated aliphatic hydrocarbons having a carbon number predominantly of C_5. This stream may contain benzene.)	649-319-00-2	267-565-5	67891-80-9	P
Distillates (petroleum), naphtha-raffinate pyrolyzate-derived, gasoline-blending; Low boiling point thermally cracked naphtha (The complex combination of hydrocarbons obtained by the	649-320-00-8	270-344-6	68425-29-6	P

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Substances	Index number	EC number	CAS number	Notes
pyrolysis fractionation at 816 °C (1500 °F) of naphtha and raffinate. It consists predominantly of hydrocarbons having a carbon number of C_9 and boiling at approximately 204 °C (400 °F).)				
Aromatic hydrocarbons, C_{6-8}, naphtha-raffinate pyrolyzate-derived; Low boiling point thermally cracked naphtha (A complex combination of hydrocarbons obtained by the fractionation pyrolysis at 816 °C (1500 °F) of naphtha and raffinate. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C_6 through C_8, including benzene.)	649-321-00-3	270-658-3	68475-70-7	P
Distillates (petroleum), thermal cracked naphtha and gas oil; Low boiling point thermally cracked naphtha (A complex combination of hydrocarbons produced by distillation of thermally cracked naphtha and/or gas oil. It consists predominantly of olefinic hydrocarbons having a carbon number of C_5 and boiling in the range of approximately 33 °C to 60 °C (91 °F to 140 °F).)	649-322-00-9	271-631-9	68603-00-9	P
Distillates (petroleum), thermal cracked naphtha and gas oil, C_5-dimer-contg.; Low boiling point thermally cracked naphtha (A complex combination of hydrocarbons produced by the extractive distillation of thermal cracked naphtha and/or gas oil. It consists predominantly of hydrocarbons having a carbon number of C_5 with some dimerized C_5 olefins and boiling in the range of approximately 33 °C to 184 °C (91 °F to 363 °F).)	649-323-00-4	271-632-4	68603-01-0	P
Distillates (petroleum), thermal cracked naphtha and gas oil, extractive; Low boiling point thermally cracked naphtha (A complex combination of hydrocarbons produced by the extractive distillation of thermal cracked naphtha and/or gas oil. It consists of paraffinic and olefinic hydrocarbons predominantly isoamylenes such as 2-methyl-1-butene and 2-methyl-2-butene and boiling in the	649-324-00-X	271-634-5	68603-03-2	P

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Substances	Index number	EC number	CAS number	Notes
range of approximately 31 °C to 40 °C (88 °F to 104 °F).)				
Distillates (petroleum), light thermal cracked, debutanized arom.; Low boiling point thermally cracked naphtha (A complex combination of hydrocarbons produced by the distillation of products from a thermal cracking process. It consists predominantly of aromatic hydrocarbons, primarily benzene.)	649-325-00-5	273-266-0	68955-29-3	P
Naphtha (petroleum), light thermal cracked, sweetened; Low boiling point thermally cracked naphtha (A complex combination of hydrocarbons obtained by subjecting a petroleum distillate from the high temperature thermal cracking of heavy oil fractions to a sweetening process to convert mercaptans. It consists predominantly of aromatics, olefins and saturated hydrocarbons boiling in the range of approximately 20 °C to 100 °C (68 °F to 212 °F).)	649-326-00-0	295-447-3	92045-65-3	P
Naphtha (petroleum), hydrotreated heavy; Low boiling point hydrogen treated naphtha (A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C_6 through C_{13} and boiling in the range of approximately 65 °C to 230 °C (149 °F to 446 °F).)	649-327-00-6	265-150-3	64742-48-9	P
Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha (A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C_4 through C_{11} and boiling in the range of approximately -20 °C to 190 °C (-4 °F to 374 °F).)	649-328-00-1	265-151-9	64742-49-0	P
Naphtha (petroleum), hydrodesulphurized light; Low boiling point hydrogen treated naphtha (A complex combination of hydrocarbons obtained from a	649-329-00-7	265-178-6	64742-73-0	P

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Substances	Index number	EC number	CAS number	Notes
catalytic hydrodesulphurization process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_4 through C_{11} and boiling in the range of approximately -20 °C to 190 °C (-4 °F to 374 °F).)				
Naphtha (petroleum), hydrodesulphurized heavy; Low boiling point hydrogen treated naphtha (A complex combination of hydrocarbons obtained from a catalytic hydrodesulphurization process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_7 through C_{12} and boiling in the range of approximately 90 °C to 230 °C (194 °F to 446 °F).)	649-330-00-2	265-185-4	64742-82-1	P
Distillates (petroleum), hydrotreated middle, intermediate boiling; Low boiling point hydrogen treated naphtha (A complex combination of hydrocarbons obtained by the distillation of products from a middle distillate hydrotreating process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_5 through C_{10} and boiling in the range of approximately 127 °C to 188 °C (262 °F to 370 °F).)	649-331-00-8	270-092-7	68410-96-8	P
Distillates (petroleum), light distillate hydrotreating process, low-boiling; Low boiling point hydrogen treated naphtha (A complex combination of hydrocarbons obtained by the distillation of products from the light distillate hydrotreating process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_6 through C_9 and boiling in the range of approximately 3 °C to 194 °C (37 °F to 382 °F).)	649-332-00-3	270-093-2	68410-97-9	P
Distillates (petroleum), hydrotreated heavy naphtha, deisohexanizer overheads; Low boiling point hydrogen treated naphtha (A complex combination of hydrocarbons obtained by distillation of the products from a heavy naphtha hydrotreating process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_3 through C_6 and boiling in	649-333-00-9	270-094-8	68410-98-0	P

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Substances	Index number	EC number	CAS number	Notes
the range of approximately -49 °C to 68 °C (-57 °F to 155 °F).)				
Solvent naphtha (petroleum), light arom., hydrotreated; Low boiling point hydrogen treated naphtha (A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C_8 through C_{10} and boiling in the range of approximately 135 °C to 210 °C (275 °F to 410 °F).)	649-334-00-4	270-988-8	68512-78-7	P
Naphtha (petroleum), hydrodesulphurized thermal cracked light; Low boiling point hydrogen treated naphtha (A complex combination of hydrocarbons obtained by fractionation of hydrodesulphurized thermal cracker distillate. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_5 to C_{11} and boiling in the range of approximately 23 °C to 195 °C (73 °F to 383 °F).)	649-335-00-X	285-511-9	85116-60-5	P
Naphtha (petroleum), hydrotreated light, cycloalkane-contg.; Low boiling point hydrogen treated naphtha (A complex combination of hydrocarbons obtained from the distillation of a petroleum fraction. It consists predominantly of alkanes and cycloalkanes boiling in the range of approximately -20 °C to 190 °C (-4 °F to 374 °F).)	649-336-00-5	285-512-4	85116-61-6	P
Naphtha (petroleum), heavy steam-cracked, hydrogenated; Low boiling point hydrogen treated naphtha	649-337-00-0	295-432-1	92045-51-7	P
Naphtha (petroleum), hydrodesulphurized full-range; Low boiling point hydrogen treated naphtha (A complex combination of hydrocarbons obtained from a catalytic hydrodesulphurization process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_4 through C_{11} and boiling in the range of	649-338-00-6	295-433-7	92045-52-8	P

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Substances	Index number	EC number	CAS number	Notes
approximately 30 °C to 250 °C (86 °F to 482 °F).)				
Naphtha (petroleum), hydrotreated light steam-cracked; Low boiling point hydrogen treated naphtha (A complex combination of hydrocarbons obtained by treating a petroleum fraction, derived from a pyrolysis process, with hydrogen in the presence of a catalyst. It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly in the range of C_5 through C_{11} and boiling in the range of approximately 35 °C to 190 °C (95 °F to 374 °F).)	649-339-00-1	295-438-4	92045-57-3	P
Hydrocarbons, $C_{4\text{-}12}$, naphtha-cracking, hydrotreated; Low boiling point hydrogen treated naphtha (A complex combination of hydrocarbons obtained by distillation from the product of naphtha steam cracking process and subsequent catalytic selective hydrogenation of gum formers. It consists of hydrocarbons having carbon numbers predominantly in the range of C_4 through C_{12} and boiling in the range of approximately 30 °C to 230 °C (86 °F to 446 °F).)	649-340-00-7	295-443-1	92045-61-9	P
Solvent naphtha (petroleum), hydrotreated light naphthenic; Low boiling point hydrogen treated naphtha (A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists predominantly of cycloparaffinic hydrocarbons having carbon numbers predominantly in the range of C_6 through C_7 and boiling in the range of approximately 73 °C to 85 °C (163 °F to 185 °F).)	649-341-00-2	295-529-9	92062-15-2	P
Naphtha (petroleum), light steam-cracked, hydrogenated; Low boiling point hydrogen treated naphtha (A complex combination of hydrocarbons produced from the separation and subsequent hydrogenation of the products of a steam-cracking process to produce ethylene. It consists predominantly of saturated and	649-342-00-8	296-942-7	93165-55-0	P

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Substances	Index number	EC number	CAS number	Notes
unsaturated paraffins, cyclic paraffins and cyclic aromatic hydrocarbons having carbon numbers predominantly in the range of C_4 through C_{10} and boiling in the range of approximately 50 °C to 200 °C (122 °F to 392 °F). The proportion of benzene hydrocarbons may vary up to 30 wt. % and the stream may also contain small amounts of sulphur and oxygenated compounds.)				
Hydrocarbons, C_{6-11}, hydrotreated, dearomatized; Low boiling point hydrogen treated naphtha (A complex combination of hydrocarbons obtained as solvents which have been subjected to hydrotreatment in order to convert aromatics to naphthenes by catalytic hydrogenation.)	649-343-00-3	297-852-0	93763-33-8	P
Hydrocarbons, C_{9-12}, hydrotreated, dearomatized; Low boiling point hydrogen treated naphtha (A complex combination of hydrocarbons obtained as solvents which have been subjected to hydrotreatment in order to convert aromatics to naphthenes by catalytic hydrogenation.)	649-344-00-9	297-853-6	93763-34-9	P
Stoddard solvent; Low boiling point naphtha — unspecified (A colourless, refined petroleum distillate that is free from rancid or objectionable odours and that boils in a range of approximately 300 °F to 400 °F.)	649-345-00-4	232-489-3	8052-41-3	P
Natural gas condensates (petroleum); Low boiling point naphtha — unspecified (A complex combination of hydrocarbons separated as a liquid from natural gas in a surface separator by retrograde condensation. It consists mainly of hydrocarbons having carbon numbers predominantly in the range of C_2 to C_{20}. It is a liquid at atmospheric temperature and pressure.)	649-346-00-X	265-047-3	64741-47-5	P
Natural gas (petroleum), raw liq. mix; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons separated as a liquid from natural gas in a gas	649-347-00-5	265-048-9	64741-48-6	P

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Substances	Index number	EC number	CAS number	Notes
recycling plant by processes such as refrigeration or absorption. It consists mainly of saturated aliphatic hydrocarbons having carbon numbers in the range of C_2 through C_8.)				
Naphtha (petroleum), light hydrocracked; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons from distillation of the products from a hydrocracking process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of C_4 through C_{10}, and boiling in the range of approximately -20 °C to 180 °C (-4 °F to 356 °F).)	649-348-00-0	265-071-4	64741-69-1	P
Naphtha (petroleum) heavy hydrocracked; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons from distillation of the products from a hydrocracking process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of C_6 through C_{12}, and boiling in the range of approximately 65 °C to 230 °C (148 °F to 446 °F).)	649-349-00-6	265-079-8	64741-78-2	P
Naphtha (petroleum), sweetened; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by subjecting a petroleum naphtha to a sweetening process to convert mercaptans or to remove acidic impurities. It consists of hydrocarbons having carbon numbers predominantly in the range of C_4 through C_{12} and boiling in the range of approximately -10 °C to 230 °C (14 °F to 446 °F).)	649-350-00-1	265-089-2	64741-87-3	P
Naphtha (petroleum), acid-treated; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained as a raffinate from a sulphuric acid treating process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_7 through C_{12} and boiling in the range of approximately 90 °C to 230 °C (194 °F to 446 °F).)	649-351-00-7	265-115-2	64742-15-0	P

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Substances	Index number	EC number	CAS number	Notes
Naphtha (petroleum), chemically neutralized heavy; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons produced by a treating process to remove acidic materials. It consists of hydrocarbons having carbon numbers predominantly in the range of C_6 through C_{12} and boiling in the range of approximately 65 °C to 230 °C (149 °F to 446 °F).)	649-352-00-2	265-122-0	64742-22-9	P
Naphtha (petroleum), chemically neutralized light; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons produced by a treating process to remove acidic materials. It consists of hydrocarbons having carbon numbers predominantly in the range of C_4 through C_{11} and boiling in the range of approximately -20 °C to 190 °C (-4 °F to 374 °F).)	649-353-00-8	265-123-6	64742-23-0	P
Naphtha (petroleum), catalytic dewaxed; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained from the catalytic dewaxing of a petroleum fraction. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_5 through C_{12} and boiling in the range of approximately 35 °C to 230 °C (95 °F to 446 °F).)	649-354-00-3	265-170-2	64742-66-1	P
Naphtha (petroleum), light steam-cracked; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by the distillation of the products from a steam cracking process. It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly in the range of C_4 through C_{11} and boiling in the range of approximately -20 °C to 190 °C (-4 °F to 374 °F). This stream is likely to contain 10 vol. % or more benzene.)	649-355-00-9	265-187-5	64742-83-2	P
Solvent naphtha (petroleum), light arom.; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having	649-356-00-4	265-199-0	64742-95-6	P

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Substances	Index number	EC number	CAS number	Notes
carbon numbers predominantly in the range of C_8 through C_{10} and boiling in the range of approximately 135 °C to 210 °C (275 °F to 410 °F).)				
Aromatic hydrocarbons, C_{6-10}, acid-treated, neutralized; Low boiling point naphtha — unspecified	649-357-00-X	268-618-5	68131-49-7	P
Distillates (petroleum), C_{3-5}, 2-methyl-2-butene-rich; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons from the distillation of hydrocarbons usually ranging in carbon numbers from C_3 through C_5, predominantly isopentane and 3-methyl-1-butene. It consists of saturated and unsaturated hydrocarbons having carbon numbers in the range of C_3 through C_5, predominantly 2-methyl-2-butene.)	649-358-00-5	270-725-7	68477-34-9	P
Distillates (petroleum), polymd. steam-cracked petroleum distillates, C_{5-12} fraction; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained from the distillation of polymerized steam-cracked petroleum distillate. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_5 through C_{12}.)	649-359-00-0	270-735-1	68477-50-9	P
Distillates (petroleum), steam-cracked, C_{5-12} fraction; Low boiling point naphtha — unspecified (A complex combination of organic compounds obtained by the distillation of products from a steam cracking process. It consists of unsaturated hydrocarbons having carbon numbers predominantly in the range of C_5 through C_{12}.)	649-360-00-6	270-736-7	68477-53-2	P
Distillates (petroleum), steam-cracked, C_{5-10} fraction, mixed with light steam-cracked petroleum naphtha C_5 fraction; Low boiling point naphtha — unspecified	649-361-00-1	270-738-8	68477-55-4	P
Extracts (petroleum), cold-acid, C_{4-6}; Low boiling point naphtha — unspecified (A complex combination of organic compounds produced by cold acid unit extraction of	649-362-00-7	270-741-4	68477-61-2	P

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Substances	Index number	EC number	CAS number	Notes
saturated and unsaturated aliphatic hydrocarbons usually ranging in carbon numbers from C_3 through C_6, predominantly pentanes and amylenes. It consists predominantly of saturated and unsaturated hydrocarbons having carbon numbers in the range of C_4 through C_6, predominantly C_5.)				
Distillates (petroleum), depentanizer overheads; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained from a catalytic cracked gas stream. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_4 through C_6.)	649-363-00-2	270-771-8	68477-894-4	P
Residues (petroleum), butane splitter bottoms; Low boiling point naphtha — unspecified (A complex residuum from the distillation of butane stream. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_4 through C_6.)	649-364-00-8	270-791-7	68478-12-6	P
Residual oils (petroleum), deisobutanizer tower; Low boiling point naphtha — unspecified (A complex residuum from the atmospheric distillation of the butane-butylene stream. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_4 through C_6.)	649-365-00-3	270-795-9	68478-16-0	P
Naphtha (petroleum), full-range coker; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons produced by the distillation of products from a fluid coker. It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly in the range of C_4 through C_{15} and boiling in the range of approximately 43 °C to 250 °C (110 °F to 500 °F).)	649-366-00-9	270-991-4	68513-02-0	P
Naphtha (petroleum), steam-cracked middle arom.; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons produced by the distillation of products from a steam-cracking process. It	649-367-00-4	271-138-9	68516-20-1	P

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Substances	Index number	EC number	CAS number	Notes
consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C_7 through C_{12} and boiling in the range of approximately 130 °C to 220 °C (266 °F to 428 °F).)				
Naphtha (petroleum), clay-treated full-range straight-run; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons resulting from treatment of full-range straight-run, naphtha with natural or modified clay, usually in a percolation process to remove the trace amounts of polar compounds and impurities present. It consists of hydrocarbons having carbon numbers predominantly in the range of C_4 through C_{11} and boiling in the range of approximately -20 °C to 220 °C (-4 °F to 429 °F).)	649-368-00-X	271-262-3	68527-21-9	P
Naphtha (petroleum), clay-treated light straight-run; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons resulting from treatment of light straight-run naphtha with a natural or modified clay, usually in a percolation process to remove the trace amounts of polar compounds and impurities, present. It consists of hydrocarbons having carbon numbers predominantly in the range of C_7 through C_{10} and boiling in the range of approximately 93 °C to 180 °C (200 °F to 356 °F).)	649-369-00-5	271-263-9	68527-22-0	P
Naphtha (petroleum), light steam-cracked arom.; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons produced by distillation of products from a steam-cracking process. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C_7 through C_9, and boiling in the range of approximately 110 °C to 165 °C (230 °F to 329 °F).)	649-370-00-0	271-264-4	68527-23-1	P
Naphtha (petroleum), light steam-cracked, debenzenized; Low boiling point naphtha — unspecified	649-371-00-6	271-266-5	68527-26-4	P

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Substances	Index number	EC number	CAS number	Notes
(A complex combination of hydrocarbons produced by distillation of products from a steam-cracking process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_4 through C_{12} and boiling in the range of approximately 80 ºC to 218 ºC (176 ºF to 424 ºF).)				
Naphtha (petroleum), arom.-contg.; Low boiling point naphtha — unspecified	649-372-00-1	271-635-0	68603-08-7	P
Gasoline, pyrolysis, debutanizer bottoms; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained from the fractionation of depropanizer bottoms. It consists of hydrocarbons having carbon numbers predominantly greater than C_5.)	649-373-00-7	271-726-5	68606-10-0	P
Naphtha (petroleum), light, sweetened; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by subjecting a petroleum distillate to a sweetening process to convert mercaptans or to remove acidic impurities. It consists predominantly of saturated and unsaturated hydrocarbons having carbon numbers predominantly in the range of C_3 through C_6 and boiling in the range of approximately -20 ºC to 100 ºC (-4 ºF to 212 ºF).)	649-374-00-2	272-206-0	68783-66-4	P
Natural gas condensates; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons separated and/or condensed from natural gas during transportation and collected at the wellhead and/or from the production, gathering, transmission, and distribution pipelines in deeps, scrubbers, etc. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_2 through C_8.)	649-375-00-8	272-896-3	68919-39-1	J
Distillates (petroleum), naphtha unifiner stripper; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons produced by stripping the products from the	649-376-00-3	272-932-8	68921-09-5	P

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Substances	Index number	EC number	CAS number	Notes
naphtha unifiner. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_2 through C_6.)				
Naphtha (petroleum), catalytic reformed light, arom.-free fraction; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons remaining after removal of aromatic compounds from catalytic reformed light naphtha in a selective absorption process. It consists predominantly of paraffinic and cyclic compounds having carbon numbers predominantly in the range of C_5 to C_8 and boiling in the range of approximately 66 °C to 121 °C (151 °F to 250 °F).)	649-377-00-9	285-510-3	85116-59-2	P
Gasoline; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons consisting primarily of paraffins, cycloparaffins, aromatic and olefinic hydrocarbons having carbon numbers predominantly greater than C_3 and boiling in the range of 30 °C to 260 °C (86 °F to 500 °F).)	649-378-00-4	289-220-8	86290-81-5	P
Aromatic hydrocarbons, C_{7-8}, dealkylation products, distn. residues; Low boiling point naphtha — unspecified	649-379-00-X	292-698-0	90989-42-7	P
Hydrocarbons, C_{4-6}, depentanizer lights, arom. hydrotreater; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained as first runnings from the depentanizer column before hydrotreatment of the aromatic charges. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_4 through C_6, predominantly pentanes and pentenes, and boiling in the range of approximately 25 °C to 40 °C (77 °F to 104 °F).)	649-380-00-5	295-298-4	91995-38-9	P
Distillates (petroleum), heat-soaked steam-cracked naphtha, C_5-rich; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by distillation of heat-soaked steam-	649-381-00-0	295-302-4	91995-41-4	P

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Substances	Index number	EC number	CAS number	Notes
cracked naphtha. It consists predominantly of hydrocarbons having carbon numbers in the range of C_4 through C_6, predominantly C_5.)				
Extracts (petroleum), catalytic reformed light naphtha solvent; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained as the extract from the solvent extraction of a catalytically reformed petroleum cut. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C_7 through C_8 and boiling in the range of approximately 100 °C to 200 °C (212 °F to 392 °F).)	649-382-00-6	295-331-2	91995-68-5	P
Naphtha (petroleum), hydrodesulphurized light, dearomatized; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by distillation of hydrodesulphurized and dearomatized light petroleum fractions. It consists predominantly of C_7 paraffins and cycloparaffins boiling in a range of approximately 90 °C to 100 °C (194 °F to 212 °F).)	649-383-00-1	295-434-2	92045-53-9	P
Naphtha (petroleum), light, C_5-rich, sweetened; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by subjecting a petroleum naphtha to a sweetening process to convert mercaptans or to remove acidic impurities. It consists of hydrocarbons having carbon numbers predominantly in the range of C_4 through C_5, predominantly C_5, and boiling in the range of approximately -10 °C to 35 °C (14 °F to 95 °F).)	649-384-00-7	295-442-6	92045-60-8	P
Hydrocarbons, C_{8-11}, naphtha-cracking, toluene cut; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by distillation from prehydrogenated cracked naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_8 through C_{11} and boiling in the	649-385-00-2	295-444-7	92045-62-0	P

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Substances	Index number	EC number	CAS number	Notes
range of approximately 130 °C to 205 °C (266 °F to 401 °F).)				
Hydrocarbons, C_{4-11}, naphtha-cracking; arom.-free; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained from prehydrogenated cracked naphtha after distillative separation of benzene- and toluene-containing hydrocarbon cuts and a higher boiling fraction. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_4 through C_{11} and boiling in the range of approximately 30 °C to 205 °C (86 °F to 401 °F).)	649-386-00-8	295-445-2	92045-63-1	P
Naphtha (petroleum), light heat-soaked, steam-cracked; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by the fractionation of steam cracked naphtha after recovery from a heat soaking process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_4 through C_6 and boiling in the range of approximately 0 °C to 80 °C (32 °F to 176 °F).)	649-387-00-3	296-028-8	92201-97-3	P
Distillates (petroleum), C_6-rich; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained from the distillation of a petroleum feedstock. It consists predominantly of hydrocarbons having carbon numbers of C_5 through C_7, rich in C_6, and boiling in the range of approximately 60 °C to 70 °C (140 °F to 158 °F).)	649-388-00-9	296-903-4	93165-19-6	P
Gasoline, pyrolysis, hydrogenated; low boiling point naphtha — unspecified (A distillation fraction from the hydrogenation of pyrolysis gasoline boiling in the range of approximately 20 °C to 200 °C (68 °F to 392 °F).)	649-389-00-4	302-639-3	94114-03-1	P
Distillates (petroleum), steam-cracked, C_{8-12}fraction, polymd., distn. lights; low boiling point naphtha — unspecified	649-390-00-X	305-750-5	95009-23-7	P

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Substances	Index number	EC number	CAS number	Notes
(A complex combination of hydrocarbons obtained by distillation of the polymerized C_8 through C_{12} fraction from steam-cracked petroleum distillates. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C_8 through C_{12}.)				
Extracts (petroleum); heavy naphtha solvent, clay-treated; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by the treatment of heavy naphthic solvent petroleum extract with bleaching earth. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_6 through C_{18}, and boiling in the range of approximately 80 °C to 180 °C (175 °F to 356 °F).)	649-391-00-5	308-261-5	97926-43-7	P
Naphtha (petroleum), light steam-cracked, debenzenized, thermally treated; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by the treatment and distillation of debenzenized light steam-cracked petroleum naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_7 through C_{12} and boiling in the range of approximately 95 °C to 200 °C (203 °F to 392 °F).)	649-392-00-0	308-713-1	98219-46-6	P
Naphtha (petroleum), light steam-cracked, thermally treated; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by the treatment and distillation of light steam-cracked petroleum naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_5 through C_6 and boiling in the range of approximately 35 °C to 80 °C (95 °F to 176 °F).)	649-393-00-6	308-714-7	98219-47-7	P
Distillates (petroleum), C_{7-9}, C_8-rich, hydrodesulphurized dearomatized; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by the distillation of petroleum light	649-394-00-1	309-862-5	101316-56-7	P

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fraction, hydrodesulphurized and dearomatized. It consists predominantly of hydrocarbons having carbon numbers in the range of C_7 through C_9, predominantly C_8 paraffins and cycloparaffins, boiling in the range of approximately 120 °C to 130 °C (248 °F to 266 °F).)				
Hydrocarbons, C_{6-8}, hydrogenated sorption-dearomatized, toluene raffination; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained during the sorption of toluene from a hydrocarbon fraction from cracked gasoline treated with hydrogen in the presence of a catalyst. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_6 through C_8 and boiling in the range of approximately 80 °C to 135 °C (176 °F to 275 °F).)	649-395-00-7	309-870-9	101316-66-9	P
Naphtha (petroleum), hydrodesulphurized full-range coker; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by fractionation from hydrodesulphurized coker distillate. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_5 to C_{11} and boiling in the range of approximately 23 °C to 196 °C (73 °F to 385 °F).)	649-396-00-2	309-879-8	101316-76-1	P
Naphtha (petroleum), sweetened light; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by subjecting a petroleum naphtha to a sweetening process to convert mercaptans or to remove acidic impurities. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_5 through C_8 and boiling in the range of approximately 20 °C to 130 °C (68 °F to 266 °F).)	649-397-00-8	309-976-5	101795-01-1	P
Hydrocarbons, C_{3-6}, C_5-rich, steam-cracked naphtha; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by distil-	649-398-00-3	310-012-0	102110-14-5	P

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lation of steam-cracked naphtha. It consists predominantly of hydrocarbons having carbon numbers in the range of C_3 through C_6, predominantly C_5.)				
Hydrocarbons, C_5-rich, dicyclopentadiene-contg.; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by distillation of the products from a steam-cracking process. It consists predominantly of hydrocarbons having carbon numbers of C_5 and dicyclopentadiene and boiling in the range of approximately 30 °C to 170 °C (86 °F to 338 °F).)	649-399-00-9	310-013-6	102110-15-6	P
Residues (petroleum), steam-cracked light, arom.; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by the distillation of the products of steam cracking or similar processes after taking off the very light products resulting in a residue starting with hydrocarbons having carbon numbers greater than C_5. It consists predominantly of aromatic hydrocarbons having carbon numbers greater than C_5 and boiling above approximately 40 °C (104 °F).)	649-400-00-2	310-057-6	102110-55-4	P
Hydrocarbons, C_5, C_{5-6}-rich; low boiling point naphtha — unspecified	649-401-00-8	270-690-8	68476-50-6	P
Hydrocarbons, C_{5-6}-rich; low boiling point naphtha — unspecified	649-402-00-3	270-695-5	68476-55-1	P
Aromatic hydrocarbons, C_{8-10}; Light oil redistillate, high boiling	649-403-00-9	292-695-4	90989-39-2	P
Distillates (petroleum), light catalytic cracked; Cracked gas oil (A complex combination of hydrocarbons produced by the distillation of products from a catalytic cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_9 through C_{25} and boiling in the range of approximately 150 °C to 400 °C (302 °F to 752 °F). It contains a relatively large proportion of bicyclic aromatic hydrocarbons.)	649-435-00-3	265-060-4	64741-59-9	

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Distillates (petroleum), intermediate catalytic cracked; Cracked gas oil (A complex combination of hydrocarbons produced by the distillation of products from a catalytic cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{11} through C_{30} and boiling in the range of approximately 205 °C to 450 °C (401 °F to 842 °F). It contains a relatively large proportion of tricyclic aromatic hydrocarbons.)	649-436-00-9	265-062-5	64741-60-2	
Distillates (petroleum), light thermal cracked; Cracked gas oil (A complex combination of hydrocarbons from the distillation of the products from a thermal cracking process. It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly in the range of C_{10} through C_{22} and boiling in the range of approximately 160 °C to 370 °C (320 °F to 698 °F).)	649-438-00-X	265-084-5	64741-82-8	
Distillates (petroleum), hydrodesulphurized light catalytic cracked; Cracked gas oil (A complex combination of hydrocarbons obtained by treating light catalytic cracked distillates with hydrogen to convert organic sulphur to hydrogen sulphide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of C_9 through C_{25} and boiling in the range of approximately 150 °C to 400 °C (302 °F to 752 °F). It contains a relatively large proportion of bicyclic aromatic hydrocarbons.)	649-439-00-5	269-781-5	68333-25-5	
Distillates (petroleum), light steam-cracked naphtha; Cracked gas oil (A complex combination of hydrocarbons from the multiple distillation of products from a steam cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{10} through C_{18}.)	649-440-00-0	270-662-5	68475-80-9	
Distillates (petroleum), cracked steam-cracked petroleum distillates; Cracked gas oil (A complex combination of hydrocarbons produced by	649-441-00-6	270-727-8	68477-38-3	

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distilling cracked steam cracked distillate and/or its fractionation products. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{10} to low molecular weight polymers.)				
Gas oils (petroleum), steam-cracked; Cracked gas oil (A complex combination of hydrocarbons produced by distillation of the products from a steam cracking process. It consists of hydrocarbons having carbon numbers predominantly greater than C_9 and boiling in the range of from approximately 205 °C to 400 °C (400 °F to 752 °F).)	649-442-00-1	271-260-2	68527-18-4	
Distillates (petroleum), hydrodesulphurized thermal cracked middle; Cracked gas oil (A complex combination of hydrocarbons obtained by fractionation from hydrodesulphurized thermal cracker distillate stocks. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{11} to C_{25} and boiling in the range of from approximately 205 °C to 400 °C (401 °F to 752 °F).)	649-443-00-7	285-505-6	85116-53-6	
Gas oils (petroleum), thermal-cracked, hydrodesulphurized; Cracked gas oil	649-444-00-2	295-411-7	92045-29-9	
Residues (petroleum), hydrogenated steam-cracked naphtha; Cracked gas oil (A complex combination of hydrocarbons obtained as a residual fraction from the distillation of hydrotreated steam-cracked naphtha. It consists predominantly of hydrocarbons boiling in the range of approximately 200 °C to 350 °C (32 °F to 662 °F).)	649-445-00-8	295-514-7	92062-00-5	
Residues (petroleum), steam-cracked naphtha distn.; Cracked gas oil (A complex combination of hydrocarbons obtained as a column bottom from the separation of effluents from steam cracking naphtha at a high temperature. It boils in the range of approximately 147 °C to 300 °C (297 °F to 572 °F) and produces a finished oil having a viscosity of 18 cSt at 50 °C.)	649-446-00-3	295-517-3	92062-04-9	

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Distillates (petroleum), light catalytic cracked, thermally degraded; Cracked gas oil (A complex combination of hydrocarbons produced by the distillation of products from a catalytic cracking process which has been used as a heat transfer fluid. It consists predominantly of hydrocarbons boiling in the range of approximately 190 °C to 340 °C (374 °F to 644 °F). This steam is likely to contain organic sulphur compounds.)	649-447-00-9	295-991-1	92201-60-0	
Residues (petroleum), steam-cracked, heat-soaked naphtha; Cracked gas oil (A complex combination of hydrocarbons obtained as residue from the distillation of steam-cracked heat-soaked naphtha and boiling in the range of approximately 150 °C to 350 °C (302 °F to 662 °F).)	649-448-00-4	297-905-8	93763-85-0	
Gas oils (petroleum), light vacuum, thermal-cracked hydrodesulphurized; Cracked gas oil (A complex combination of hydrocarbons obtained by catalytic dehydrosulphurization of thermal-cracked light vacuum petroleum. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{14} through C_{20} and boiling in the range of approximately 270 °C to 370 °C (518 °F to 698 °F).)	649-450-00-5	308-278-8	97926-59-5	
Distillates (petroleum), hydrodesulphurized middle coker; Cracked gas oil (A complex combination of hydrocarbons by fractionation from hydrodesulphurized coker distillate stocks. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{12} through C_{21} and boiling in the range of approximately 200 °C to 360 °C (392 °F to 680 °F).)	649-451-00-0	309-865-1	101316-59-0	
Distillates (petroleum), heavy steam-cracked; Cracked gas oil (A complex combination of hydrocarbons obtained by distillation of steam cracking heavy residues. It consists predominantly of highly alkylated heavy aromatic hydrocarbons boiling in the range of approxi-	649-452-00-6	309-939-3	101631-14-5	

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Substances	Index number	EC number	CAS number	Notes
mately 250 °C to 400 °C (482 °F to 752 °F).)				
Distillates (petroleum), heavy hydrocracked; Base oil — unspecified (A complex combination of hydrocarbons from the distillation of the products from a hydrocracking process. It consists predominantly of saturated hydrocarbons having carbon numbers in the range of C_{15} through C_{39} and boiling in the range of approximately 260 °C to 600 °C (500 °F to 1112 °F).)	649-453-00-1	265-077-7	64741-76-0	L
Distillates (petroleum), solvent-refined heavy paraffinic; Base oil — unspecified (A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50} and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19 cSt at 40 °C).)	649-454-00-7	265-090-8	64741-88-4	L
Distillates (petroleum), solvent-refined light paraffinic; Base oil — unspecified (A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30} and produces a finished oil having a viscosity of less than 100 SUS at 100 °F (19 cSt at 40 °C).)	649-455-00-2	265-091-3	64741-89-5	L
Residual oils (petroleum), solvent deasphalted; Base oil — unspecified (A complex combination of hydrocarbons obtained as the solvent soluble fraction from C_3-C_4 solvent deasphalting of a residuum. It consists of hydrocarbons having carbon numbers predominantly higher than C_{25} and boiling above approximately 400 °C (752 °F).)	649-456-00-8	265-096-0	64741-95-3	L
Distillates (petroleum), solvent-refined heavy naphthenic; Base oil — unspecified (A complex combination of hydrocarbons obtained as the	649-457-00-3	265-097-6	64741-96-4	L

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raffinate from a solvent extraction process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50} and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19 cSt at 40 °C.) It contains relatively few normal paraffins.				
Distillates (petroleum), solvent-refined light naphthenic; Base oil — unspecified (A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30} and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins.)	649-458-00-9	265-098-1	64741-97-5	L
Residual oils (petroleum), solvent-refined; Base oil — unspecified (A complex combination of hydrocarbons obtained as the solvent insoluble fraction from solvent refining of a residuum using a polar organic solvent such as phenol or furfural. It consists of hydrocarbons having carbon numbers predominantly greater than C_{25} and boiling above approximately 400 °C (752 °F).)	649-459-00-4	265-101-6	64742-01-4	L
Distillates (petroleum), clay-treated paraffinic; Base oil — unspecified (A complex combination of hydrocarbons resulting from treatment of a petroleum fraction with natural or modified clay in either a contacting or percolation process to remove the trace amounts of polar compounds and impurities present. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50} and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19 cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.)	649-460-00-X	265-137-2	64742-36-5	L

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Distillates (petroleum), clay-treated light paraffinic; Base oil — unspecified (A complex combination of hydrocarbons resulting from treatment of a petroleum fraction with natural or modified clay in either a contacting or percolation process to remove the trace amounts of polar compounds and impurities present. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30} and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19 cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.)	649-461-00-5	265-138-8	64742-37-6	L
Residual oils (petroleum), clay-treated; Base oil — unspecified (A complex combination of hydrocarbons obtained by the treatment of a residual oil with a natural or modified clay in either a contacting or percolation process to remove the trace amounts of polar compounds and impurities present. It consists of hydrocarbons having carbon numbers predominantly greater than C_{25} and boiling above approximately 400 °C (752 °F).)	649-462-00-0	265-143-5	64742-41-2	L
Distillates (petroleum), clay-treated heavy naphthenic; Base oil — unspecified (A complex combination of hydrocarbons resulting from treatment of a petroleum fraction with a natural or modified clay in either a contacting or percolation process to remove the trace amounts of polar compounds and impurities present. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50} and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins.)	649-463-00-6	265-146-1	64742-44-5	L
Distillates (petroleum), clay-treated light naphthenic; Base oil — unspecified (A complex combination of hydrocarbons resulting from treatment of a petroleum fraction with natural or modified clay in either a	649-464-00-1	265-147-7	64742-45-6	L

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Substances	Index number	EC number	CAS number	Notes
contacting or percolation process to remove the trace amounts of polar compounds and impurities present. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30} and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins.)				
Distillates (petroleum), hydrotreated heavy naphthenic; Base oil — unspecified (A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50} and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins.)	649-465-00-7	265-155-0	64742-52-5	L
Distillates (petroleum), hydrotreated light naphthenic; Base oil — unspecified (A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30} and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins.)	649-466-00-2	265-156-6	64742-53-6	L
Distillates (petroleum), hydrotreated heavy paraffinic; Base oil — unspecified (A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50} and produces a finished oil of at least 100 SUS at 100 °F (19 cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.)	649-467-00-8	265-157-1	64742-54-7	L

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Distillates (petroleum), hydrotreated light paraffinic; Base oil — unspecified (A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30} and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19 cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.)	649-468-00-3	265-158-7	64742-55-8	L
Distillates (petroleum), solvent-dewaxed light paraffinic; Base oil — unspecified (A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30} and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19 cSt at 40 °C).)	649-469-00-9	265-159-2	64742-56-9	L
Residual oils (petroleum), hydrotreated; Base oil — unspecified (A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly greater than C_{25} and boiling above approximately 400 °C (752 °F).)	649-470-00-4	265-160-8	64742-57-0	L
Residual oils (petroleum), solvent-dewaxed; Base oil — unspecified (A complex combination of hydrocarbons obtained by removal of long, branched chain hydrocarbons from a residual oil by solvent crystallization. It consists of hydrocarbons having carbon numbers predominantly greater than C_{25} and boiling above approximately 400 °C (752 °F).)	649-471-00-X	265-166-0	64742-62-7	L
Distillates (petroleum), solvent-dewaxed heavy naphthenic; Base oil — unspecified (A complex combination of hydrocarbons obtained by removal of normal paraffins	649-472-00-5	265-167-6	64742-63-8	L

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from a petroleum fraction by solvent crystallization. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50} and produces a finished oil of not less than 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins.)				
Distillates (petroleum), solvent-dewaxed light naphthenic; Base oil — unspecified (A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30} and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins.)	649-473-00-0	265-168-1	64742-64-9	L
Distillates (petroleum), solvent-dewaxed heavy paraffinic; Base oil — unspecified (A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50} and produces a finished oil with a viscosity of not less than 100 SUS at 100 °F (19 cSt at 40 °C).)	649-474-00-6	265-169-7	64742-65-0	L
Naphthenic oils (petroleum), catalytic dewaxed heavy; Base oil — unspecified (A complex combination of hydrocarbons obtained from a catalytic dewaxing process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50} and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins.)	649-475-00-1	265-172-3	64742-68-3	L
Naphthenic oils (petroleum), catalytic dewaxed light; Base oil — unspecified (A complex combination of hydrocarbons obtained from a catalytic dewaxing process. It	649-476-00-7	265-173-9	64742-69-4	L

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consists of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30} and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins.)				
Paraffin oils (petroleum), catalytic dewaxed heavy; Base oil — unspecified (A complex combination of hydrocarbons obtained from a catalytic dewaxing process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50} and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19 cSt at 40 °C).)	649-477-00-2	265-174-4	64742-70-7	L
Paraffin oils (petroleum), catalytic dewaxed light; Base oil — unspecified (A complex combination of hydrocarbons obtained from a catalytic dewaxing process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30} and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19 cSt at 40 °C).)	649-478-00-8	265-176-5	64742-71-8	L
Naphthenic oils (petroleum), complex dewaxed heavy; Base oil — unspecified (A complex combination of hydrocarbons obtained by removing straight chain paraffin hydrocarbons as a solid by treatment with an agent such as urea. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50} and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins.)	649-479-00-3	265-179-1	64742-75-2	L
Naphthenic oils (petroleum), complex dewaxed light; Base oil — unspecified (A complex combination of hydrocarbons obtained from a catalytic dewaxing process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30} and produces a finished oil having a viscosity less than 100 SUS at 100 °F	649-480-00-9	265-180-7	64742-76-3	L

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(19 cSt at 40 °C). It contains relatively few normal paraffins.)				
Lubricating oils (petroleum), C_{20-50}, hydrotreated neutral oil-based high-viscosity; Base oil — unspecified (A complex combination of hydrocarbons obtained by treating light vacuum gas oil, heavy vacuum gas oil, and solvent deasphalted residual oil with hydrogen in the presence of a catalyst in a two stage process with dewaxing being carried out between the two stages. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50} and produces a finished oil having a viscosity of approximately 112 cSt at 40 °C. It contains a relatively large proportion of saturated hydrocarbons.)	649-481-00-4	276-736-3	72623-85-9	L
Lubricating oils (petroleum), C_{15-30}, hydrotreated neutral oil-based; Base oil — unspecified (A complex combination of hydrocarbons obtained by treating light vacuum gas oil and heavy vacuum gas oil with hydrogen in the presence of a catalyst in a two stage process with dewaxing being carried out between the two stages. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30} and produces a finished oil having a viscosity of approximately 15 cSt at 40 °C. It contains a relatively large proportion of saturated hydrocarbons.)	649-482-00-X	276-737-9	72623-86-0	L
Lubricating oils (petroleum), C_{20-50}, hydrotreated neutral oil-based; Base oil — unspecified (A complex combination of hydrocarbons obtained by treating light vacuum gas oil, heavy vacuum gas oil and solvent deasphalted residual oil with hydrogen in the presence of a catalyst in a two stage process with dewaxing being carried out between the two stages. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50} and produces a finished oil with a viscosity of approximately 32 cSt at 40 °C. It contains a relatively large proportion of saturated hydrocarbons.)	649-483-00-5	276-738-4	72623-87-1	L

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Lubricating oils; Base oil — unspecified (A complex combination of hydrocarbons obtained from solvent extraction and dewaxing processes. It consists predominantly of saturated hydrocarbons having carbon numbers in the range of C_{15} through C_{50}.)	649-484-00-0	278-012-2	74869-22-0	L
Distillates (petroleum), complex dewaxed heavy paraffinic; Base oil — unspecified (A complex combination of hydrocarbons obtained by dewaxing heavy paraffinic distillate. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50} and produces a finished oil with a viscosity of equal to or greater than 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins.)	649-485-00-6	292-613-7	90640-91-8	L
Distillates (petroleum), complex dewaxed light paraffinic; Base oil — unspecified (A complex combination of hydrocarbons obtained by dewaxing light paraffinic distillate. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{12} through C_{30} and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19 cSt at 40 °C). It contains relatively few normal paraffins.)	649-486-00-1	292-614-2	90640-92-9	L
Distillates (petroleum), solvent-dewaxed heavy paraffinic, clay-treated; Base oil — unspecified (A complex combination of hydrocarbons obtained by treating dewaxed heavy paraffinic distillate with neutral or modified clay in either a contacting or percolation process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50}.)	649-487-00-7	292-616-3	90640-94-1	L
Hydrocarbons, C_{20-50}, solvent-dewaxed heavy paraffinic, hydrotreated; Base oil — unspecified (A complex combination of hydrocarbons produced by treating dewaxed heavy paraffinic distillate with hydrogen in the presence of a	649-488-00-2	292-617-9	90640-95-2	L

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Substances	Index number	EC number	CAS number	Notes
catalyst. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50}.)				
Distillates (petroleum), solvent dewaxed light paraffinic, clay-treated; Base oil — unspecified (A complex combination of hydrocarbons resulting from treatment of dewaxed light paraffinic distillate with natural or modified clay in either a contacting or percolation process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30}.)	649-489-00-8	292-618-4	90640-96-3	L
Distillates (petroleum), solvent dewaxed light paraffinic, hydrotreated; Base oil — unspecified (A complex combination of hydrocarbons produced by treating a dewaxed light paraffinic distillate with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30}.)	649-490-00-3	292-620-5	90640-97-4	L
Residual oils (petroleum), hydrotreated solvent dewaxed; Base oil — unspecified	649-491-00-9	292-656-1	90669-74-2	L
Residual oils (petroleum), catalytic dewaxed; Base oil — unspecified	649-492-00-4	294-843-3	91770-57-9	L
Distillates (petroleum), dewaxed heavy paraffinic, hydrotreated; Base oil — unspecified (A complex combination of hydrocarbons obtained from an intensive treatment of dewaxed distillate by hydrogenation in the presence of a catalyst. It consists predominantly of saturated hydrocarbons having carbon numbers in the range of C_{25} through C_{39} and produces a finished oil with a viscosity of approximately 44 cSt at 50 °C.)	649-493-00-X	295-300-3	91995-39-0	L
Distillates (petroleum), dewaxed light paraffinic, hydrotreated; Base oil — unspecified (A complex combination of hydrocarbons obtained from an intensive treatment of dewaxed distillate by hydrogenation in the presence of a catalyst. It consists predominantly of saturated hydrocarbons having	649-494-00-5	295-301-9	91995-40-3	L

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Substances	Index number	EC number	CAS number	Notes
carbon numbers in the range of C_{21} through C_{29} and produces a finished oil with a viscosity of approximately 13 cSt at 50 °C.)				
Distillates (petroleum), hydrocracked solvent-refined, dewaxed; Base oil — unspecified (A complex combination of liquid hydrocarbons obtained by recrystallization of dewaxed hydrocracked solvent-refined petroleum distillates.)	649-495-00-0	295-306-6	91995-45-8	L
Distillates (petroleum), solvent-refined light naphthenic, hydrotreated; Base oil — unspecified (A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst and removing the aromatic hydrocarbons by solvent extraction. It consists predominantly of naphthenic hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30} and produces a finished oil with a viscosity of between 13-15 cSt at 40 °C.)	649-496-00-6	295-316-0	91995-54-9	L
Lubricating oils (petroleum) C_{17-35}, solvent-extd., dewaxed, hydrotreated; Base oil — unspecified	649-497-00-1	295-423-2	92045-42-6	L
Lubricating oils (petroleum), hydrocracked nonarom. solvent-deparaffined; Base oil — unspecified	649-498-00-7	295-424-8	92045-43-7	L
Residual oils (petroleum), hydrocracked acid-treated solvent-dewaxed; Base oil — unspecified (A complex combination of hydrocarbons produced by solvent removal of paraffins from the residue of the distillation of acid-treated, hydrocracked heavy paraffins and boiling approximately above 380 °C (716 °F).)	649-499-00-2	295-499-7	92061-86-4	L
Paraffin oils (petroleum), solvent-refined dewaxed heavy; Base oil — unspecified (A complex combination of hydrocarbons obtained from sulphur-containing paraffinic crude oil. It consists predominantly of a solvent refined deparaffinated lubricating oil with a viscosity of 65 cSt at 50 °C.)	649-500-00-6	295-810-6	92129-09-4	L

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Substances	Index number	EC number	CAS number	Notes
Lubricating oils (petroleum), base oils, paraffinic; Base oil — unspecified (A complex combination of hydrocarbons obtained by refining crude oil. It consists predominantly of aromatics, naphthenics and paraffinics and produces a finished oil with a viscosity of 120 SUS at 100 °F (23 cSt at 40 °C).)	649-501-00-1	297-474-6	93572-43-1	L
Hydrocarbons, hydrocracked paraffinic distn. residues, solvent-dewaxed; Base oil — unspecified	649-502-00-7	297-857-8	93763-38-3	L
Hydrocarbons, C_{20-50}, residual oil hydrogenation vacuum distillate; Base oil — unspecified	649-503-00-2	300-257-1	93924-61-9	L
Distillates (petroleum), solvent-refined hydrotreated heavy; hydrogenated; Base oil — unspecified	649-504-00-8	305-588-5	94733-08-1	L
Distillates (petroleum), solvent-refined hydrocracked light; Base oil — unspecified (A complex combination of hydrocarbons obtained by solvent dearomatization of the residue of hydrocracked petroleum. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{18} through C_{27} and boiling in the range of approximately 370 °C to 450 °C (698 °F to 842 °F).)	649-505-00-3	305-589-0	94733-09-2	L
Lubricating oils (petroleum), C_{18-40}, solvent-dewaxed hydrocracked distillate-based; Base oil — unspecified (A complex combination of hydrocarbons obtained by solvent deparaffination of the distillation residue from hydrocracked petroleum. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{18} through C_{40} and boiling in the range of approximately 370 °C to 550 °C (698 °F to 1022 °F).)	649-506-00-9	305-594-8	94733-15-0	L
Lubricating oils (petroleum), C_{18-40}, solvent-dewaxed hydrogenated raffinate-based; Base oil — unspecified (A complex combination of hydrocarbons obtained by solvent deparaffination of the hydrogenated raffinate obtained by solvent extraction of a hydro-	649-507-00-4	305-595-3	94733-16-1	L

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Substances	Index number	EC number	CAS number	Notes
treated petroleum distillate. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{18} through C_{40} and boiling in the range of approximately 370 °C to 550 °C (698 °F to 1022 °F).)				
Hydrocarbons, C_{13-30}, arom.-rich, solvent-extd. naphthenic distillate; Base oil — unspecified	649-508-00-X	305-971-7	95371-04-3	L
Hydrocarbons, C_{16-32}, arom.-rich, solvent-extd. naphthenic distillate; Base oil — unspecified	649-509-00-5	305-972-2	95371-05-4	L
Hydrocarbons, C_{37-68}, dewaxed deasphalted hydrotreated vacuum distn. residues; Base oil — unspecified	649-510-00-0	305-974-3	95371-07-6	L
Hydrocarbons, C_{37-65}, hydrotreated deasphalted vacuum distn. residues; Base oil — unspecified	649-511-00-6	305-975-9	95371-08-7	L
Distillates (petroleum), hydrocracked solvent-refined light; Base oil — unspecified (A complex combination of hydrocarbons obtained by the solvent treatment of a distillate from hydrocracked petroleum distillates. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{18} through C_{27} and boiling in the range of approximately 370 °C to 450 °C (698 °F to 842 °F).)	649-512-00-1	307-010-7	97488-73-8	L
Distillates (petroleum), solvent-refined hydrogenated heavy; Base oil — unspecified (A complex combination of hydrocarbons obtained by the treatment of a hydrogenated petroleum distillate with a solvent. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{19} through C_{40} and boiling in the range of approximately 390 °C to 550 °C (734 °F to 1022 °F).)	649-513-00-7	307-011-2	97488-74-9	L
Lubricating oils (petroleum) C_{18-27}, hydrocracked solvent-dewaxed; Base oil — unspecified	649-514-00-2	307-034-8	97488-95-4	L

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Substances	Index number	EC number	CAS number	Notes
Hydrocarbons, C_{17-30}, hydrotreated solvent-deasphalted atm. distn. residue, distn. lights; Base oil — unspecified (A complex combination of hydrocarbons obtained as first runnings from the vacuum distillation of effluents from the treatment of a solvent deasphalted short residue with hydrogen in the presence of a catalyst. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{17} through C_{30} and boiling in the range of approximately 300 °C to 400 °C (572 °F to 752 °F). It produces a finished oil having a viscosity of 4 cSt at approximately 100 °C (212 °F).)	649-515-00-8	307-661-7	97675-87-1	L
Hydrocarbons, C_{17-40}, hydrotreated solvent-deasphalted distn. residue, vacuum distn. lights; Base oil — unspecified (A complex combination of hydrocarbons obtained as first runnings from the vacuum distillation of effluents from the catalytic hydrotreatment of a solvent deasphalted short residue having a viscosity of 8 cSt at approximately 100 °C (212 °F). It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{17} through C_{40} and boiling in the range of approximately 300 °C to 500 °C (592 °F to 932 °F).)	649-516-00-3	307-755-8	97722-06-0	L
Hydrocarbons, C_{13-27}, solvent-extd. light naphthenic; Base oil — unspecified (A complex combination of hydrocarbons obtained by extraction of the aromatics from a light naphthenic distillate having a viscosity of 9.5 cSt at 40 °C (104 °F). It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{13} through C_{27} and boiling in the range of approximately 240 °C to 400 °C (464 °F to 752 °F).)	649-517-00-9	307-758-4	97722-09-3	L
Hydrocarbons, C_{14-29}, solvent-extd. light naphthenic; Base oil — unspecified (A complex combination of hydrocarbons obtained by extraction of the aromatics from a light naphthenic distillate having a viscosity of 16 cSt at 40 °C (104 °F). It consists	649-518-00-4	307-760-5	97722-10-6	L

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Substances	Index number	EC number	CAS number	Notes
predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{14} through C_{29} and boiling in the range of approximately 250 °C to 425 °C (482 °F to 797 °F).)				
Hydrocarbons, C_{27-42}, dearomatized; Base oil — unspecified	649-519-00-X	308-131-8	97862-81-2	L
Hydrocarbons, C_{17-30}, hydrotreated distillates, distn. lights; Base oil — unspecified	649-520-00-5	308-132-3	97862-82-3	L
Hydrocarbons, C_{27-45}, naphthenic vacuum distn.; Base oil — unspecified	649-521-00-0	308-133-9	97862-83-4	L
Hydrocarbons, C_{27-45}, dearomatized; Base oil — unspecified	649-522-00-6	308-287-7	97926-68-6	L
Hydrocarbons, C_{20-58}, hydrotreated; Base oil — unspecified	649-523-00-1	308-289-8	97926-70-0	L
Hydrocarbons, C_{27-42}, naphthenic; Base oil — unspecified	649-524-00-7	308-290-3	97926-71-1	L
Residual oils (petroleum), carbon-treated solvent-dewaxed; Base oil — unspecified (A complex combination of hydrocarbons obtained by the treatment of solvent-dewaxed petroleum residual oils with activated charcoal for the removal of trace polar constituents and impurities.)	649-525-00-2	309-710-8	100684-37-5	L
Residual oils (petroleum), clay-treated solvent-dewaxed; Base oil — unspecified (A complex combination of hydrocarbons obtained by treatment of solvent-dewaxed petroleum residual oils with bleaching earth for the removal of trace polar constituents and impurities.)	649-526-00-8	309-711-3	100684-38-6	L
Lubricating oils (petroleum) C_{25}, solvent-extd., deasphalted, dewaxed, hydrogenated; baseoil — unspecified (A complex combination of hydrocarbons obtained by solvent extraction and hydrogenation of vacuum distillation residues. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of greater than C_{25} and produces a finished oil with a viscosity in the order of 32 cSt to 37 cSt at 100 °C (212 °F).)	649-527-00-3	309-874-0	101316-69-2	L

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Substances	Index number	EC number	CAS number	Notes
Lubricating oils (petroleum) C_{17-32}, solvent-extd., dewaxed, hydrogenated; Base oil — unspecified (A complex combination of hydrocarbons obtained by solvent extraction and hydrogenation of atmospheric distillation residues. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{17} through C_{32} and produces a finished oil with a viscosity in the order of 17 cSt to 23 cSt at 40 °C (104 °F).)	649-528-00-9	309-875-6	101316-70-5	L
Lubricating oils (petroleum) C_{20-35}, solvent-extd., dewaxed, hydrogenated; Base oil — unspecified (A complex combination of hydrocarbons obtained by solvent extraction and hydrogenation of atmospheric distillation residues. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{35} and produces a finished oil with a viscosity in the order of 37 cSt to 44 cSt at 40 °C (104 °F).)	649-529-00-4	309-876-1	101316-71-6	L
Lubricating oils (petroleum) C_{24-50}, solvent-extd., dewaxed, hydrogenated; Base oil — unspecified (A complex combination of hydrocarbons obtained by solvent extraction and hydrogenation of atmospheric distillation residues. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{24} through C_{50} and produces a finished oil with a viscosity in the order of 16 cSt to 75 cSt at 40 °C (104 °F).)	649-530-00-X	309-877-7	101316-72-7	L
Extracts (petroleum), heavy naphthenic distillate solvent, arom. conc.; Distillate aromatic extract (treated) (An aromatic concentrate produced by adding water to heavy naphthenic distillate solvent extract and extraction solvent.)	649-531-00-5	272-175-3	68783-00-6	L
Extracts (petroleum), solvent-refined heavy paraffinic distillate solvent; Distillate aromatic extract (treated) (A complex combination of hydrocarbons obtained as the	649-532-00-0	272-180-0	68783-04-0	L

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Substances	Index number	EC number	CAS number	Notes
extract from the re-extraction of solvent-refined heavy paraffinic distillate. It consists of saturated and aromatic hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50}.)				
Extracts (petroleum), heavy paraffinic distillates, solvent-deasphalted; Distillate aromatic extract (treated) (A complex combination of hydrocarbons obtained as the extract from a solvent extraction of heavy paraffinic distillate.)	649-533-00-6	272-342-0	68814-89-1	L
Extracts (petroleum), heavy naphthenic distillate solvent, hydrotreated; Distillate aromatic extract (treated) (A complex combination of hydrocarbons obtained by treating a heavy naphthenic distillate solvent extract with hydrogen in the presence of a catalyst. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50} and produces a finished oil of at least 19 cSt at 40 °C (100 SUS at 100 °F).)	649-534-00-1	292-631-5	90641-07-9	L
Extracts (petroleum), heavy paraffinic distillate solvent, hydrotreated; Distillate aromatic extract (treated) (A complex combination of hydrocarbons produced by treating a heavy paraffinic distillate solvent extract with hydrogen in the presence of a catalyst. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{21} through C_{33} and boiling in the range of approximately 350 °C to 480 °C (662 °F to 896 °F).)	649-535-00-7	292-632-0	90641-08-0	L
Extracts (petroleum), light paraffinic distillate solvent, hydrotreated; Distillate aromatic extract (treated) (A complex combination of hydrocarbons produced by treating a light paraffinic distillate solvent extract with hydrogen in the presence of a catalyst. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{17} through C_{26} and boiling in the range of approximately 280 °C to 400 °C (536 °F to 752 °F).)	649-536-00-2	292-633-6	90641-09-1	L

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Substances	Index number	EC number	CAS number	Notes
Extracts (petroleum), hydro-treated paraffinic light distillate solvent; Distillate aromatic extract (treated) (A complex combination of hydrocarbons obtained as the extract from solvent extraction of intermediate paraffinic top solvent distillate that is treated with hydrogen in the presence of a catalyst. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C_{16} through C_{36}.)	649-537-00-8	295-335-4	91995-73-2	L
Extracts (petroleum), light naphthenic distillate solvent, hydrodesulphurized; Distillate aromatic extract (treated) (A complex combination of hydrocarbons obtained by treating the extract, obtained from a solvent extraction process, with hydrogen in the presence of a catalyst under conditions primarily to remove sulphur compounds. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30}. This stream is likely to contain 5 wt. % or more of 4- to 6-membered condensed ring aromatic hydrocarbons.)	649-538-00-3	295-338-0	91995-75-4	L
Extracts (petroleum), light paraffinic distillate solvent, acid-treated; Distillate aromatic extract (treated) (A complex combination of hydrocarbons obtained as a fraction of the distillation of an extract from the solvent extraction of light paraffinic top petroleum distillates that is subjected to a sulphuric acid refining. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C_{16} through C_{32}.)	649-539-00-9	295-339-6	91995-76-5	L
Extracts (petroleum), light paraffinic distillate solvent, hydrodesulphurized; Distillate aromatic extract (treated) (A complex combination of hydrocarbons obtained by solvent extraction of a light paraffin distillate and treated with hydrogen to convert the organic sulphur to hydrogen sulphide which is eliminated. It consists predominantly of hydrocarbons having carbon numbers predominantly in the	649-540-00-4	295-340-1	91995-77-6	L

▼M23

Substances	Index number	EC number	CAS number	Notes
range of C_{15} through C_{40} and produces a finished oil having a viscosity of greater than 10 cSt at 40 °C.)				
Extracts (petroleum), light vacuum gas oil solvent, hydrotreated; Distillate aromatic extract (treated) (A complex combination of hydrocarbons obtained by solvent extraction from light vacuum petroleum gas oils and treated with hydrogen in the presence of a catalyst. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C_{13} through C_{30}.)	649-541-00-X	295-342-2	91995-79-8	L
Extracts (petroleum), heavy paraffinic distillate solvent, clay-treated; Distillate aromatic extract (treated) (A complex combination of hydrocarbons resulting from treatment of a petroleum fraction with natural or modified clay in either a contact or percolation process to remove the trace amounts of polar compounds and impurities present. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50}. This stream is likely to contain 5 wt. % or more 4-6 membered ring aromatic hydrocarbons.)	649-542-00-5	296-437-1	92704-08-0	L
Extracts (petroleum), heavy naphthenic distillate solvent, hydrodesulphurized; Distillate aromatic extract (treated) (A complex combination of hydrocarbons obtained from a petroleum stock by treating with hydrogen to convert organic sulphur to hydrogen sulphide which is removed. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{50} and produces a finished oil with a viscosity of greater than 19 cSt at 40 °C.)	649-543-00-0	297-827-4	93763-10-1	L
Extracts (petroleum), solvent-dewaxed heavy paraffinic distillate solvent, hydrodesulphurized; Distillate aromatic extract (treated) (A complex combination of hydrocarbons obtained from a	649-544-00-6	297-829-5	93763-11-2	L

▼M23

Substances	Index number	EC number	CAS number	Notes
solvent dewaxed petroleum stock by treating with hydrogen to convert organic sulphur to hydrogen sulphide which is removed. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{50} and produces a finished oil with a viscosity of greater than 19 cSt at 40 °C.)				
Extracts (petroleum), light paraffinic distillate solvent, carbon-treated; Distillate aromatic extract (treated) (A complex combination of hydrocarbons obtained as a fraction from distillation of an extract recovered by solvent extraction of light paraffinic top petroleum distillate treated with activated charcoal to remove traces of polar constituents and impurities. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C_{16} through C_{32}.)	649-545-00-1	309-672-2	100684-02-4	L
Extracts (petroleum), light paraffinic distillate solvent, clay-treated; Distillate aromatic extract (treated) (A complex combination of hydrocarbons obtained as a fraction from distillation of an extract recovered by solvent extraction of light paraffinic top petroleum distillates treated with bleaching earth to remove traces of polar constituents and impurities. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C_{16} through C_{32}.)	649-546-00-7	309-673-8	100684-03-5	L
Extracts (petroleum), light vacuum, gas oil solvent, carbon-treated; Distillate aromatic extract (treated) (A complex combination of hydrocarbons obtained by solvent extraction of light vacuum petroleum gas oil treated with activated charcoal for the removal of trace polar constituents and impurities. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C_{13} through C_{30}.)	649-547-00-2	309-674-3	100684-04-6	L

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Substances	Index number	EC number	CAS number	Notes
Extracts (petroleum), light vacuum, gas oil solvent, clay-treated; Distillate aromatic extract (treated) (A complex combination of hydrocarbons obtained by solvent extraction of light vacuum petroleum gas oils treated with bleaching earth for removal of trace polar constituents and impurities. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C_{13} through C_{30}.)	649-548-00-8	309-675-9	100684-05-7	L
Foots oil (petroleum); Foots oil (A complex combination of hydrocarbons obtained as the oil fraction from a solvent deoiling or a wax sweating process. It consists predominantly of branched chain hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50}.)	649-549-00-3	265-171-8	64742-67-2	L
Foots oil (petroleum), hydrotreated; Foots oil	649-550-00-9	295-394-6	92045-12-0	L

▼M27

Refractory ceramic fibres; Special Purpose Fibres, with the exception of those specified elsewhere in Annex I to Directive 67/548/EEC; [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide ($Na_2O+K_2O+CaO+MgO+BaO$) content less or equal to 18 % by weight]	650-017-00-8			R

▼M23

Point 30 — Mutagens: category 2

Substances	Index number	EC number	CAS number	Notes
hexamethylphosphoric triamide; hexamethylphosphoramide	015-106-00-2	211-653-8	680-31-9	
diethyl sulphate	016-027-00-6	200-589-6	64-67-5	

▼M45

Chromium (VI) trioxide	024-001-00-0	215-607-8	1333-82-0	E

▼M37

Sodium chromate	024-018-00-3	231-889-5	7775-11-3	E

▼M37

Substances	Index number	EC number	CAS number	Notes
▼M45				
Cadmium fluoride	048-006-00-2	232-222-0	7790-79-6	E
Cadmium chloride	048-008-00-3	233-296-7	10108-64-2	E
Cadmium sulphate	048-009-00-9	233-331-6	10124-36-4	E
▼M37				
Butane [containing ≥ 0,1 % Butadiene (203-450-8)] [1]	601-004-01-8	203-448-7 [1]	106-97-8 [1]	C, S
Isobutane [containing ≥ 0,1 % Butadiene (203-450-8)] [2]		20-857-2 [2]	75-28-5 [2]	
1,3-Butadiene buta-1,3-diene	601-013-00-X	203-450-8	106-99-0	D
▼M45				
Benzene	601-020-00-8	200-753-7	71-43-2	E
▼M23				
benzo[a]pyrene; benzo[d,e,f] chrysene	601-032-00-3	200-028-5	50-32-8	
1,2-dibromo-3-chloropropane	602-021-00-6	202-479-3	96-12-8	
ethylene oxide; oxirane	603-023-00-X	200-849-9	75-21-8	
▼M37				
Propylene oxide; 1,2-epoxy-propane; Methyloxirane	603-055-00-4	200-879-2	75-56-9	E
▼M36				
2,2'-Bioxirane; 1,2:3,4-diepoxy-butane	603-060-00-1	215-979-1	1464-53-5	
▼M23				
methyl acrylamidomethoxya-cetate (containing ≥ 0,1 % acrylamid)	607-190-00-X	401-890-7	77402-03-0	
methyl acrylamidoglycolate (containing ≥ 0,1 % acrylamide)	607-210-00-7	403-230-3	77402-05-2	
▼M45				
2-nitrotoluene	609-065-00-5	201-853-3	88-72-2	E
4,4'-oxydianiline (1) and its salts; p-aminophenyl ether (1)	612-199-00-7	202-977-0 (1)	101-80-4 (1)	E
▼M23				
ethyleneimine; aziridine	613-001-00-1	205-793-9	151-56-4	

▼M23

Substances	Index number	EC number	CAS number	Notes
▼M45				
Carbendazim (ISO); methyl benzimidazol-2-ylcarbamate	613-048-00-8	234-232-0	10605-21-7	
Benomyl (ISO); methyl 1-(butylcarbamoyl)benzimidazol-2-ylcarbamate	613-049-00-3	241-775-7	17804-35-2	
▼M23				
acrylamide	616-003-00-0	201-173-7	79-06-1	
▼M37				
1,3,5-tris-[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione	616-091-00-0	423-400-0	59653-74-6	E
▼M45				
Potassium dichromate	024-002-00-6	231-906-6	7778-50-9	E
Ammonium dichromate	024-003-00-1	232-143-1	7789-09-5	E
Sodium dichromate anhydrate	024-004-00-7	234-190-3	10588-01-9	E
Sodium dichromate, dihydrate	024-004-01-4	234-190-3	7789-12-0	E
▼M25				
Chromyl dichloride; chromic oxychloride	024-005-00-2	239-056-8	14977-61-8	
Potassium chromate	024-006-00-8	232-140-5	7789-00-6	
1,3,5,-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione; TGIC	615-021-00-6	219-514-3	2451-62-9	
▼M45				
Gases (petroleum), catalytic cracked naphtha depropaniser overhead, C_3-rich acid-free; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation of catalytic cracked hydrocarbons and treated to remove acidic impurities. It consists of hydrocarbons having carbon numbers in the range of C_2 through C_4, predominantly C_3.)	649-062-00-6	270-755-0	68477-73-6	H, K
Gases (petroleum), catalytic cracker; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of the products from a catalytic cracking process. It consists predominantly of aliphatic hydrocarbons having	649-063-00-1	270-756-6	68477-74-7	H, K

▼M45

Substances	Index number	EC number	CAS number	Notes
carbon numbers predominantly in the range of C_1 through C_6.)				
Gases (petroleum), catalytic cracker, C_{1-5}-rich; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of products from a catalytic cracking process. It consists of aliphatic hydrocarbons having carbon numbers in the range of C_1 through C_6, predominantly C_1 through C_5.)	649-064-00-7	270-757-1	68477-75-8	H, K
Gases (petroleum), catalytic polymerised naphtha stabiliser overhead, C_{2-4}-rich; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation stabilisation of catalytic polymerised naphtha. It consists of aliphatic hydrocarbons having carbon numbers in the range of C_2 through C_6, predominantly C_2 through C_4.)	649-065-00-2	270-758-7	68477-76-9	H, K
Gases (petroleum), catalytic reformer, C_{1-4}-rich; Petroleum gas (A complex combination of hydrocarbons produced by distillation of products from a catalytic reforming process. It consists of hydrocarbons having carbon numbers in the range of C_1 through C_6, predominantly C_1 through C_4.)	649-066-00-8	270-760-8	68477-79-2	H, K
Gases (petroleum), C_{3-5} olefinic-paraffinic alkylation feed; Petroleum gas (A complex combination of olefinic and paraffinic hydrocarbons having carbon numbers in the range of C_3 through C_5 which are used as alkylation feed. Ambient temperatures normally exceed the critical temperature of these combinations.)	649-067-00-3	270-765-5	68477-83-8	H, K
Gases (petroleum), C_4-rich; Petroleum gas (A complex combination of hydrocarbons produced by distillation of products from a catalytic fractionation process. It consists of aliphatic hydrocarbons having carbon numbers in the range of C_3 through C_5, predominantly C_4.)	649-068-00-9	270-767-6	68477-85-0	H, K

▼M45

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), deethaniser overheads; Petroleum gas (A complex combination of hydrocarbons produced from distillation of the gas and gasoline fractions from the catalytic cracking process. It contains predominantly ethane and ethylene.)	649-069-00-4	270-768-1	68477-86-1	H, K
Gases (petroleum), deisobutaniser tower overheads; Petroleum gas (A complex combination of hydrocarbons produced by the atmospheric distillation of a butane-butylene stream. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_3 through C_4.)	649-070-00-X	270-769-7	68477-87-2	H, K
Gases (petroleum), depropaniser dry, propene-rich; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of products from the gas and gasoline fractions of a catalytic cracking process. It consists predominantly of propylene with some ethane and propane.)	649-071-00-5	270-772-3	68477-90-7	H, K
Gases (petroleum), depropaniser overheads; Petroleum gas (A complex combination of hydrocarbons produced by distillation of products from the gas and gasoline fractions of a catalytic cracking process. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_2 through C_4.)	649-072-00-0	270-773-9	68477-91-8	H, K
Gases (petroleum), gas recovery plant depropaniser overheads; Petroleum gas (A complex combination of hydrocarbons obtained by fractionation of miscellaneous hydrocarbon streams. It consists predominantly of hydrocarbons having carbon numbers in the range of C_1 through C_4, predominantly propane.)	649-073-00-6	270-777-0	68477-94-1	H, K
Gases (petroleum), Girbatol unit feed; Petroleum gas (A complex combination of hydrocarbons that is used as the feed into the Girbatol unit to remove hydrogen sulfide. It consists of aliphatic hydrocarbons having carbon numbers	649-074-00-1	270-778-6	68477-95-2	H, K

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Substances	Index number	EC number	CAS number	Notes
predominantly in the range of C_2 through C_4.)				
Gases (petroleum), isomerised naphtha fractionator, C_4-rich, hydrogen sulfide-free; Petroleum gas	649-075-00-7	270-782-8	68477-99-6	H, K
Tail gas (petroleum), catalytic cracked clarified oil and thermal cracked vacuum residue fractionation reflux drum; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation of catalytic cracked clarified oil and thermal cracked vacuum residue. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-076-00-2	270-802-5	68478-21-7	H, K
Tail gas (petroleum), catalytic cracked naphtha stabilisation absorber; Petroleum gas (A complex combination of hydrocarbons obtained from the stabilisation of catalytic cracked naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-077-00-8	270-803-0	68478-22-8	H, K
Tail gas (petroleum), catalytic cracker, catalytic reformer and hydrodesulfuriser combined fractionater; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation of products from catalytic cracking, catalytic reforming and hydrodesulfurising processes treated to remove acidic impurities. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-078-00-3	270-804-6	68478-24-0	H, K
Tail gas (petroleum), catalytic reformed naphtha fractionation stabiliser; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation stabilisation of catalytic reformed naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-079-00-9	270-806-7	68478-26-2	H, K

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Substances	Index number	EC number	CAS number	Notes
Tail gas (petroleum), saturate gas plant mixed stream, C_4-rich; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation stabilisation of straight-run naphtha, distillation tail gas and catalytic reformed naphtha stabiliser tail gas. It consists of hydrocarbons having carbon numbers in the range of C_3 through C_6, predominantly butane and isobutene.)	649-080-00-4	270-813-5	68478-32-0	H, K
Tail gas (petroleum), saturate gas recovery plant, C_{1-2}-rich; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation of distillate tail gas, straight-run naphtha, catalytic reformed naphtha stabiliser tail gas. It consists predominantly of hydrocarbons having carbon numbers in the range of C_1 through C_5, predominantly methane and ethane.)	649-081-00-X	270-814-0	68478-33-1	H, K
Tail gas (petroleum), vacuum residues thermal cracker; Petroleum gas (A complex combination of hydrocarbons obtained from the thermal cracking of vacuum residues. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-082-00-5	270-815-6	68478-34-2	H, K
Hydrocarbons, C_{3-4}-rich, petroleum distillate; Petroleum gas (A complex combination of hydrocarbons produced by distillation and condensation of crude oil. It consists of hydrocarbons having carbon numbers in the range of C_3 through C_5, predominantly C_3 through C_4.)	649-083-00-0	270-990-9	68512-91-4	H, K
Gases (petroleum), full-range straight-run naphtha dehexaniser off; Petroleum gas (A complex combination of hydrocarbons obtained by the fractionation of the full-range straight-run naphtha. It consists of hydrocarbons having carbon numbers predominantly in the range of C_2 through C_6.)	649-084-00-6	271-000-8	68513-15-5	H, K
Gases (petroleum), hydrocracking depropaniser off, hydrocarbon-rich; Petroleum gas (A complex combination of hydrocarbon produced by the	649-085-00-1	271-001-3	68513-16-6	H, K

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Substances	Index number	EC number	CAS number	Notes
distillation of products from a hydrocracking process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4. It may also contain small amounts of hydrogen and hydrogen sulfide.)				
Gases (petroleum), light straight-run naphtha stabiliser off; Petroleum gas (A complex combination of hydrocarbons obtained by the stabilisation of light straight-run naphtha. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_2 through C_6.)	649-086-00-7	271-002-9	68513-17-7	H, K
Residues (petroleum), alkylation splitter, C_4-rich; Petroleum gas (A complex residuum from the distillation of streams from various refinery operations. It consists of hydrocarbons having carbon numbers in the range of C_4 through C_5, predominantly butane, and boiling in the range of approximately –11,7 °C to 27,8 °C.)	649-087-00-2	271-010-2	68513-66-6	H, K
Hydrocarbons, C_{1-4}; Petroleum gas (A complex combination of hydrocarbons provided by thermal cracking and absorber operations and by distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4 and boiling in the range of approximately –164 °C to –0,5 °C.)	649-088-00-8	271-032-2	68514-31-8	H, K
Hydrocarbons, C_{1-4}, sweetened; Petroleum gas (A complex combination of hydrocarbons obtained by subjecting hydrocarbon gases to a sweetening process to convert mercaptans or to remove acidic impurities. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4 and boiling in the range of approximately –164 °C to –0,5 °C.)	649-089-00-3	271-038-5	68514-36-3	H, K
Hydrocarbons, C_{1-3}; Petroleum gas (A complex combination of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_3 and	649-090-00-9	271-259-7	68527-16-2	H, K

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Substances	Index number	EC number	CAS number	Notes
boiling in the range of approximately -164 °C to -42 °C.)				
Hydrocarbons, C_{1-4}, debutaniser fraction; Petroleum gas	649-091-00-4	271-261-8	68527-19-5	H, K
Gases (petroleum), C_{1-5}, wet; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of crude oil and/or the cracking of tower gas oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-092-00-X	271-624-0	68602-83-5	H, K
Hydrocarbons, C_{2-4}; Petroleum gas	649-093-00-5	271-734-9	68606-25-7	H, K
Hydrocarbons, C_3; Petroleum gas	649-094-00-0	271-735-4	68606-26-8	H, K
Gases (petroleum), alkylation feed; Petroleum gas (A complex combination of hydrocarbons produced by the catalytic cracking of gas oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_3 through C_4.)	649-095-00-6	271-737-5	68606-27-9	H, K
Gases (petroleum), depropaniser bottoms fractionation off; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation of depropaniser bottoms. It consists predominantly of butane, isobutane and butadiene.)	649-096-00-1	271-742-2	68606-34-8	H, K
Gases (petroleum), refinery blend; Petroleum gas (A complex combination obtained from various processes. It consists of hydrogen, hydrogen sulfide and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-097-00-7	272-183-7	68783-07-3	H, K
Gases (petroleum), catalytic cracking; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of the products from a catalytic cracking process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_3 through C_5.)	649-098-00-2	272-203-4	68783-64-2	H, K

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Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), C_{2-4}, sweetened; Petroleum gas (A complex combination of hydrocarbons obtained by subjecting a petroleum distillate to a sweetening process to convert mercaptans or to remove acidic impurities. It consists predominantly of saturated and unsaturated hydrocarbons having carbon numbers predominantly in the range of C_2 through C_4 and boiling in the range of approximately –51 °C to –34 °C.)	649-099-00-8	272-205-5	68783-65-3	H, K
Gases (petroleum), crude oil fractionation off; Petroleum gas (A complex combination of hydrocarbons produced by the fractionation of crude oil. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-100-00-1	272-871-7	68918-99-0	H, K
Gases (petroleum), dehexaniser off; Petroleum gas (A complex combination of hydrocarbons obtained by the fractionation of combined naphtha streams. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-101-00-7	272-872-2	68919-00-6	H, K
Gases (petroleum), light straight run gasoline fractionation stabiliser off; Petroleum gas (A complex combination of hydrocarbons obtained by the fractionation of light straight-run gasoline. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-102-00-2	272-878-5	68919-05-1	H, K
Gases (petroleum), naphtha unifiner desulfurisation stripper off; Petroleum gas (A complex combination of hydrocarbons produced by a naphtha unifiner desulfurisation process and stripped from the naphtha product. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-103-00-8	272-879-0	68919-06-2	H, K

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Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), straight-run naphtha catalytic reforming off; Petroleum gas (A complex combination of hydrocarbons obtained by the catalytic reforming of straight-run naphtha and fractionation of the total effluent. It consists of methane, ethane, and propane.)	649-104-00-3	272-882-7	68919-09-5	H, K
Gases (petroleum), fluidised catalytic cracker splitter overheads; Petroleum gas (A complex combination of hydrocarbons produced by the fractionation of the charge to the C_3-C_4 splitter. It consists predominantly of C_3 hydrocarbons.)	649-105-00-9	272-893-7	68919-20-0	H, K
Gases (petroleum), straight-run stabiliser off; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation of the liquid from the first tower used in the distillation of crude oil. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-106-00-4	272-883-2	68919-10-8	H, K
Gases (petroleum), catalytic cracked naphtha debutaniser; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation of catalytic cracked naphtha. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-107-00-X	273-169-3	68952-76-1	H, K
Tail gas (petroleum), catalytic cracked distillate and naphtha stabiliser; Petroleum gas (A complex combination of hydrocarbons obtained by the fractionation of catalytic cracked naphtha and distillate. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-108-00-5	273-170-9	68952-77-2	H, K
Tail gas (petroleum), thermal-cracked distillate, gas oil and naphtha absorber; Petroleum gas (A complex combination of hydrocarbons obtained from the separation of thermal-cracked distillates, naphtha and gas oil. It consists predominantly of hydrocarbons having carbon	649-109-00-0	273-175-6	68952-81-8	H, K

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Substances	Index number	EC number	CAS number	Notes
numbers predominantly in the range of C_1 through C_6.)				
Tail gas (petroleum), thermal cracked hydrocarbon fractionation stabiliser, petroleum coking; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation stabilisation of thermal cracked hydrocarbons from a petroleum coking process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-110-00-6	273-176-1	68952-82-9	H, K
Gases (petroleum), light steam-cracked, butadiene concentration; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of products from a thermal cracking process. It consists of hydrocarbons having a carbon number predominantly of C_4.)	649-111-00-1	273-265-5	68955-28-2	H, K
Gases (petroleum), straight-run naphtha catalytic reformer stabiliser overhead; Petroleum gas (A complex combination of hydrocarbons obtained by the catalytic reforming of straight-run naphtha and the fractionation of the total effluent. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_2 through C_4.)	649-112-00-7	273-270-2	68955-34-0	H, K
Hydrocarbons, C_4; Petroleum gas	649-113-00-2	289-339-5	87741-01-3	H, K
Alkanes, C_{1-4}, C_3-rich; Petroleum gas	649-114-00-8	292-456-4	90622-55-2	H, K
Gases (petroleum), steam-cracker C_3-rich; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of products from a steam cracking process. It consists predominantly of propylene with some propane and boils in the range of approximately –70 °C to 0 °C.)	649-115-00-3	295-404-9	92045-22-2	H, K
Hydrocarbons, C_4, steam-cracker distillate; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of the products of a steam cracking process. It consists predominantly of	649-116-00-9	295-405-4	92045-23-3	H, K

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Substances	Index number	EC number	CAS number	Notes
hydrocarbons having a carbon number of C_4, predominantly 1-butene and 2-butene, containing also butane and isobutene and boiling in the range of approximately –12 °C to 5 °C.)				
Petroleum gases, liquefied, sweetened, C_4 fraction; Petroleum gas (A complex combination of hydrocarbons obtained by subjecting a liquefied petroleum gas mix to a sweetening process to oxidise mercaptans or to remove acidic impurities. It consists predominantly of C_4 saturated and unsaturated hydrocarbons.)	649-117-00-4	295-463-0	92045-80-2	H, K, S
Raffinates (petroleum), steam-cracked C_4 fraction cuprous ammonium acetate extn., C_{3-5} and C_{3-5} unsaturated, butadiene-free; Petroleum gas	649-119-00-5	307-769-4	97722-19-5	H, K
Gases (petroleum), amine system feed; Refinery gas (The feed gas to the amine system for removal of hydrogen sulphide. It consists primarily of hydrogen. Carbon monoxide, carbon dioxide, hydrogen sulfide and aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5 may also be present.)	649-120-00-0	270-746-1	68477-65-6	H, K
Gases (petroleum), benzene unit hydrodesulphuriser off; Refinery gas (Off gases produced by the benzene unit. It consists primarily of hydrogen. Carbon monoxide and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6, including benzene, may also be present.)	649-121-00-6	270-747-7	68477-66-7	H, K
Gases (petroleum), benzene unit recycle, hydrogen-rich; Refinery gas (A complex combination of hydrocarbons obtained by recycling the gases of the benzene unit. It consists primarily of hydrogen with various small amounts of carbon monoxide and hydrocarbons having carbon numbers in the range of C_1 through C_6.)	649-122-00-1	270-748-2	68477-67-8	H, K

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Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), blend oil, hydrogen-nitrogen-rich; Refinery gas (A complex combination of hydrocarbons obtained by distillation of a blend oil. It consists primarily of hydrogen and nitrogen with various small amounts of carbon monoxide, carbon dioxide, and aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-123-00-7	270-749-8	68477-68-9	H, K
Gases (petroleum), catalytic reformed naphtha stripper overheads; Refinery gas (A complex combination of hydrocarbons obtained from stabilisation of catalytic reformed naphtha. It consists of hydrogen and saturated hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-124-00-2	270-759-2	68477-77-0	H, K
Gases (petroleum), C_{6-8} catalytic reformer recycle; Refinery gas (A complex combination of hydrocarbons produced by distillation of products from catalytic reforming of C_6-C_8 feed and recycled to conserve hydrogen. It consists primarily of hydrogen. It may also contain various small amounts of carbon monoxide, carbon dioxide, nitrogen, and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-125-00-8	270-761-3	68477-80-5	H, K
Gases (petroleum), C_{6-8} catalytic reformer; Refinery gas (A complex combination of hydrocarbons produced by distillation of products from catalytic reforming of C_6-C_8 feed. It consists of hydrocarbons having carbon numbers in the range of C_1 through C_5 and hydrogen.)	649-126-00-3	270-762-9	68477-81-6	H, K
Gases (petroleum), C_{6-8} catalytic reformer recycle, hydrogen-rich; Refinery gas	649-127-00-9	270-763-4	68477-82-7	H, K
Gases (petroleum), C_2-return stream; Refinery gas (A complex combination of hydrocarbons obtained by the extraction of hydrogen from a gas stream which consists primarily of hydrogen with small amounts of nitrogen, carbon monoxide, methane,	649-128-00-4	270-766-0	68477-84-9	H, K

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Substances	Index number	EC number	CAS number	Notes
ethane, and ethylene. It contains predominantly hydrocarbons such as methane, ethane, and ethylene with small amounts of hydrogen, nitrogen and carbon monoxide.)				
Gases (petroleum), dry sour, gas-concentration-unit-off; Refinery gas (The complex combination of dry gases from a gas concentration unit. It consists of hydrogen, hydrogen sulphide and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_3.)	649-129-00-X	270-774-4	68477-92-9	H, K
Gases (petroleum), gas concentration reabsorber distillation; Refinery gas (A complex combination of hydrocarbons produced by distillation of products from combined gas streams in a gas concentration reabsorber. It consists predominantly of hydrogen, carbon monoxide, carbon dioxide, nitrogen, hydrogen sulphide and hydrocarbons having carbon numbers in the range of C_1 through C_3.)	649-130-00-5	270-776-5	68477-93-0	H, K
Gases (petroleum), hydrogen absorber off; Refinery gas (A complex combination obtained by absorbing hydrogen from a hydrogen rich stream. It consists of hydrogen, carbon monoxide, nitrogen, and methane with small amounts of C_2 hydrocarbons.)	649-131-00-0	270-779-1	68477-96-3	H, K
Gases (petroleum), hydrogen-rich; Refinery gas (A complex combination separated as a gas from hydrocarbon gases by chilling. It consists primarily of hydrogen with various small amounts of carbon monoxide, nitrogen, methane, and C_2 hydrocarbons.)	649-132-00-6	270-780-7	68477-97-4	H, K
Gases (petroleum), hydrotreater blend oil recycle, hydrogen-nitrogen-rich; Refinery gas (A complex combination obtained from recycled hydrotreated blend oil. It consists primarily of hydrogen and nitrogen with various small amounts of carbon monoxide, carbon dioxide and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-133-00-1	270-781-2	68477-98-5	H, K

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Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), recycle, hydrogen-rich; Refinery gas (A complex combination obtained from recycled reactor gases. It consists primarily of hydrogen with various small amounts of carbon monoxide, carbon dioxide, nitrogen, hydrogen sulphide, and saturated aliphatic hydrocarbons having carbon numbers in the range of C_1 through C_5.)	649-134-00-7	270-783-3	68478-00-2	H, K
Gases (petroleum), reformer make-up, hydrogen-rich; Refinery gas (A complex combination obtained from the reformers. It consists primarily of hydrogen with various small amounts of carbon monoxide and aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-135-00-2	270-784-9	68478-01-3	H, K
Gases (petroleum), reforming hydrotreater; Refinery gas (A complex combination obtained from the reforming hydrotreating process. It consists primarily of hydrogen, methane, and ethane with various small amounts of hydrogen sulphide and aliphatic hydrocarbons having carbon numbers predominantly in the range C_3 through C_5.)	649-136-00-8	270-785-4	68478-02-4	H, K
Gases (petroleum), reforming hydrotreater, hydrogen-methane-rich; Refinery gas (A complex combination obtained from the reforming hydrotreating process. It consists primarily of hydrogen and methane with various small amounts of carbon monoxide, carbon dioxide, nitrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_2 through C_5.)	649-137-00-3	270-787-5	68478-03-5	H, K
Gases (petroleum), reforming hydrotreater make-up, hydrogen-rich; Refinery gas (A complex combination obtained from the reforming hydrotreating process. It consists primarily of hydrogen with various small amounts of carbon monoxide and aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-138-00-9	270-788-0	68478-04-6	H, K

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Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), thermal cracking distillation; Refinery gas (A complex combination produced by distillation of products from a thermal cracking process. It consists of hydrogen, hydrogen sulphide, carbon monoxide, carbon dioxide and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-139-00-4	270-789-6	68478-05-7	H, K
Tail gas (petroleum), catalytic cracker refractionation absorber; Refinery gas (A complex combination of hydrocarbons obtained from refractionation of products from a catalytic cracking process. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_3.)	649-140-00-X	270-805-1	68478-25-1	H, K
Tail gas (petroleum), catalytic reformed naphtha separator; Refinery gas (A complex combination of hydrocarbons obtained from the catalytic reforming of straight-run naphtha. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-141-00-5	270-807-2	68478-27-3	H, K
Tail gas (petroleum), catalytic reformed naphtha stabiliser; Refinery gas (A complex combination of hydrocarbons obtained from the stabilisation of catalytic reformed naphtha. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-142-00-0	270-808-8	68478-28-4	H, K
Tail gas (petroleum), cracked distillate hydrotreater separator; Refinery gas (A complex combination of hydrocarbons obtained by treating cracked distillates with hydrogen in the presence of a catalyst. It consists of hydrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-143-00-6	270-809-3	68478-29-5	H, K

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Substances	Index number	EC number	CAS number	Notes
Tail gas (petroleum), hydrodesulphurised straight-run naphtha separator; Refinery gas (A complex combination of hydrocarbons obtained from hydrodesulphurisation of straight-run naphtha. It consists of hydrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-144-00-1	270-810-9	68478-30-8	H, K
Gases (petroleum), catalytic reformed straight-run naphtha stabiliser overheads; Refinery gas (A complex combination of hydrocarbons obtained from the catalytic reforming of straight-run naphtha followed by fractionation of the total effluent. It consists of hydrogen, methane, ethane and propane.)	649-145-00-7	270-999-8	68513-14-4	H, K
Gases (petroleum), reformer effluent high-pressure flash drum off; Refinery gas (A complex combination produced by the high-pressure flashing of the effluent from the reforming reactor. It consists primarily of hydrogen with various small amounts of methane, ethane, and propane.)	649-146-00-2	271-003-4	68513-18-8	H, K
Gases (petroleum), reformer effluent low-pressure flash drum off; Refinery gas (A complex combination produced by low-pressure flashing of the effluent from the reforming reactor. It consists primarily of hydrogen with various small amounts of methane, ethane, and propane.)	649-147-00-8	271-005-5	68513-19-9	H, K
Gases (petroleum), oil refinery gas distillation off; Refinery gas (A complex combination separated by distillation of a gas stream containing hydrogen, carbon monoxide, carbon dioxide and hydrocarbons having carbon numbers in the range of C_1 through C_6 or obtained by cracking ethane and propane. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_2, hydrogen, nitrogen, and carbon monoxide.)	649-148-00-3	271-258-1	68527-15-1	H, K

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Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), benzene unit hydrotreater depentaniser overheads; Refinery gas (A complex combination produced by treating the feed from the benzene unit with hydrogen in the presence of a catalyst followed by depentanising. It consists primarily of hydrogen, ethane and propane with various small amounts of nitrogen, carbon monoxide, carbon dioxide and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6. It may contain trace amounts of benzene.)	649-149-00-9	271-623-5	68602-82-4	H, K
Gases (petroleum), secondary absorber off, fluidised catalytic cracker overheads fractionator; Refinery gas (A complex combination produced by the fractionation of the overhead products from the catalytic cracking process in the fluidised catalytic cracker. It consists of hydrogen, nitrogen, and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_3.)	649-150-00-4	271-625-6	68602-84-6	H, K
Petroleum products, refinery gases; Refinery gas (A complex combination which consists primarily of hydrogen with various small amounts of methane, ethane and propane.)	649-151-00-X	271-750-6	68607-11-4	H, K
Gases (petroleum), hydrocracking low-pressure separator; Refinery gas (A complex combination obtained by the liquid-vapour separation of the hydrocracking process reactor effluent. It consists predominantly of hydrogen and saturated hydrocarbons having carbon numbers predominantly in the range of C_1 through C_3.)	649-152-00-5	272-182-1	68783-06-2	H, K
Gases (petroleum), refinery; Refinery gas (A complex combination obtained from various petroleum refining operations. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_3.)	649-153-00-0	272-338-9	68814-67-5	H, K

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Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), platformer products separator off; Refinery gas (A complex combination obtained from the chemical reforming of naphthenes to aromatics. It consists of hydrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_2 through C_4.)	649-154-00-6	272-343-6	68814-90-4	H, K
Gases (petroleum), hydrotreated sour kerosine depentaniser stabiliser off; Refinery gas (The complex combination obtained from the depentaniser stabilisation of hydrotreated kerosine. It consists primarily of hydrogen, methane, ethane, and propane with various small amounts of nitrogen, hydrogen sulphide, carbon monoxide and hydrocarbons having carbon numbers predominantly in the range of C_4 through C_5.)	649-155-00-1	272-775-5	68911-58-0	H, K
Gases (petroleum), hydrotreated sour kerosine flash drum; Refinery gas (A complex combination obtained from the flash drum of the unit treating sour kerosine with hydrogen in the presence of a catalyst. It consists primarily of hydrogen and methane with various small amounts of nitrogen, carbon monoxide, and hydro-carbons having carbon numbers predominantly in the range of C_2 through C_5.)	649-156-00-7	272-776-0	68911-59-1	H, K
Gases (petroleum), distillate unifiner desulphurisation stripper off; Refinery gas (A complex combination stripped from the liquid product of the unifiner desulphurisation process. It consists of hydrogen sulphide, methane, ethane, and propane.)	649-157-00-2	272-873-8	68919-01-7	H, K
Gases (petroleum), fluidised catalytic cracker fractionation off; Refinery gas (A complex combination produced by the fractionation of the overhead product of the fluidised catalytic cracking process. It consists of hydrogen, hydrogen sulphide, nitrogen, and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-158-00-8	272-874-3	68919-02-8	H, K

▼M45

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), fluidised catalytic cracker scrubbing secondary absorber off; Refinery gas (A complex combination produced by scrubbing the overhead gas from the fluidised catalytic cracker. It consists of hydrogen, nitrogen, methane, ethane and propane.)	649-159-00-3	272-875-9	68919-03-9	H, K
Gases (petroleum), heavy distillate hydrotreater desulphurisation stripper off; Refinery gas (A complex combination stripped from the liquid product of the heavy distillate hydrotreater desulphurisation process. It consists of hydrogen, hydrogen sulphide, and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-160-00-9	272-876-4	68919-04-0	H, K
Gases (petroleum), platformer stabiliser off, light ends fractionation; Refinery gas (A complex combination obtained by the fractionation of the light ends of the platinum reactors of the platformer unit. It consists of hydrogen, methane, ethane and propane.)	649-161-00-4	272-880-6	68919-07-3	H, K
Gases (petroleum), preflash tower off, crude distillation; Refinery gas (A complex combination produced from the first tower used in the distillation of crude oil. It consists of nitrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-162-00-X	272-881-1	68919-08-4	H, K
Gases (petroleum), tar stripper off; Refinery gas (A complex combination obtained by the fractionation of reduced crude oil. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-163-00-5	272-884-8	68919-11-9	H, K
Gases (petroleum), unifiner stripper off; Refinery gas (A combination of hydrogen and methane obtained by fractionation of the products from the unifiner unit.)	649-164-00-0	272-885-3	68919-12-0	H, K

▼M45

Substances	Index number	EC number	CAS number	Notes
Tail gas (petroleum), catalytic hydrodesulphurised naphtha separator; Refinery gas (A complex combination of hydrocarbons obtained from the hydrodesulphurisation of naphtha. It consists of hydrogen, methane, ethane, and propane.)	649-165-00-6	273-173-5	68952-79-4	H, K
Tail gas (petroleum), straight-run naphtha hydrodesulphuriser; Refinery gas (A complex combination obtained from the hydrodesulphurisation of straight-run naphtha. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-166-00-1	273-174-0	68952-80-7	H, K
Gases (petroleum), sponge absorber off, fluidised catalytic cracker and gas oil desulphuriser overhead fractionation; Refinery gas (A complex combination obtained by the fractionation of products from the fluidised catalytic cracker and gas oil desulphuriser. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-167-00-7	273-269-7	68955-33-9	H, K
Gases (petroleum), crude distillation and catalytic cracking; Refinery gas (A complex combination produced by crude distillation and catalytic cracking processes. It consists of hydrogen, hydrogen sulphide, nitrogen, carbon monoxide and paraffinic and olefinic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-168-00-2	273-563-5	68989-88-8	H, K
Gases (petroleum), gas oil diethanolamine scrubber off; Refinery gas (A complex combination produced by desulphurisation of gas oils with diethanolamine. It consists predominantly of hydrogen sulphide, hydrogen and aliphatic hydrocarbons having carbon numbers in the range of C_1 through C_5.)	649-169-00-8	295-397-2	92045-15-3	H, K

▼M45

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), gas oil hydrodesulphurisation effluent; Refinery gas (A complex combination obtained by separation of the liquid phase from the effluent from the hydrogenation reaction. It consists predominantly of hydrogen, hydrogen sulphide and aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_3.)	649-170-00-3	295-398-8	92045-16-4	H, K
Gases (petroleum), gas oil hydrodesulphurisation purge; Refinery gas (A complex combination of gases obtained from the reformer and from the purges from the hydrogenation reactor. It consists predominantly of hydrogen and aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-171-00-9	295-399-3	92045-17-5	H, K
Gases (petroleum), hydrogenator effluent flash drum off; Refinery gas (A complex combination of gases obtained from flash of the effluents after the hydrogenation reaction. It consists predominantly of hydrogen and aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-172-00-4	295-400-7	92045-18-6	H, K
Gases (petroleum), naphtha steam cracking high-pressure residual; Refinery gas (A complex combination obtained as a mixture of the non-condensable portions from the product of a naphtha steam cracking process as well as residual gases obtained during the preparation of subsequent products. It consists predominantly of hydrogen and paraffinic and olefinic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5 with which natural gas may also be mixed.)	649-173-00-X	295-401-2	92045-19-7	H, K
Gases (petroleum), residue visbaking off; Refinery gas (A complex combination obtained from viscosity reduction of residues in a furnace. It consists predominantly of hydrogen sulphide and paraffinic and olefinic hydrocarbons having carbon	649-174-00-5	295-402-8	92045-20-0	H, K

▼M45

Substances	Index number	EC number	CAS number	Notes
numbers predominantly in the range of C_1 through C_5.)				
Gases (petroleum), C_{3-4}; Petroleum gas (A complex combination of hydrocarbons produced by distillation of products from the cracking of crude oil. It consists of hydrocarbons having carbon numbers in the range of C_3 through C_4, predominantly of propane and propylene, and boiling in the range of approximately –51 °C to –1 °C.)	649-177-00-1	268-629-5	68131-75-9	H, K
Tail gas (petroleum), catalytic cracked distillate and catalytic cracked naphtha fractionation absorber; Petroleum gas (The complex combination of hydrocarbons from the distillation of the products from catalytic cracked distillates and catalytic cracked naphtha. It consists predominantly of hydrocarbons having carbon numbers in the range of C_1 through C_4.)	649-178-00-7	269-617-2	68307-98-2	H, K
Tail gas (petroleum), catalytic polymerisation naphtha fractionation stabiliser; Petroleum gas (A complex combination of hydrocarbons from the fractionation stabilisation products from polymerisation of naphtha. It consists predominantly of hydrocarbons having carbon numbers in the range of C_1 through C_4.)	649-179-00-2	269-618-8	68307-99-3	H, K
Tail gas (petroleum), catalytic reformed naphtha fractionation stabiliser, hydrogen sulphide-free; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation stabilisation of catalytic reformed naphtha and from which hydrogen sulphide has been removed by amine treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-180-00-8	269-619-3	68308-00-9	H, K
Tail gas (petroleum), cracked distillate hydrotreater stripper; Petroleum gas (A complex combination of hydrocarbons obtained by treating thermal cracked distillates with hydrogen in the presence of a catalyst. It consists predominantly of saturated	649-181-00-3	269-620-9	68308-01-0	H, K

▼M45

Substances	Index number	EC number	CAS number	Notes
hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)				
Tail gas (petroleum), straight-run distillate hydrodesulphuriser, hydrogen sulphide-free; Petroleum gas (A complex combination of hydrocarbons obtained from catalytic hydrodesulphurisation of straight run distillates and from which hydrogen sulphide has been removed by amine treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-182-00-9	269-630-3	68308-10-1	H, K
Tail gas (petroleum), gas oil catalytic cracking absorber; Petroleum gas (A complex combination of hydrocarbons obtained from the distillation of products from the catalytic cracking of gas oil. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-183-00-4	269-623-5	68308-03-2	H, K
Tail gas (petroleum), gas recovery plant; Petroleum gas (A complex combination of hydrocarbons from the distillation of products from miscellaneous hydrocarbon streams. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-184-00-X	269-624-0	68308-04-3	H, K
Tail gas (petroleum), gas recovery plant deethaniser; Petroleum gas (A complex combination of hydrocarbons from the distillation of products from miscellaneous hydrocarbon streams. It consists of hydrocarbon having carbon numbers predominantly in the range of C_1 through C_4.)	649-185-00-5	269-625-6	68308-05-4	H, K
Tail gas (petroleum), hydrodesulphurised distillate and hydrodesulphurised naphtha fractionator, acid-free; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation of hydrodesulphurised naphtha and distillate hydrocarbon streams and treated to remove acidic impurities. It consists predominantly of hydrocarbons having carbon	649-186-00-0	269-626-1	68308-06-5	H, K

▼M45

Substances	Index number	EC number	CAS number	Notes
numbers predominantly in the range of C_1 through C_5.)				
Tail gas (petroleum), hydrodesulphurised vacuum gas oil stripper, hydrogen sulphide-free; Petroleum gas (A complex combination of hydrocarbons obtained from stripping stabilisation of catalytic hydrodesulphurised vacuum gas oil and from which hydrogen sulphide has been removed by amine treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-187-00-6	269-627-7	68308-07-6	H, K
Tail gas (petroleum), light straight-run naphtha stabiliser, hydrogen sulphide-free; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation stabilisation of light straight-run naphtha and from which hydrogen sulphide has been removed by amine treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-188-00-1	269-629-8	68308-09-8	H, K
Tail gas (petroleum), propane-propylene alkylation feed prep deethaniser; Petroleum gas (A complex combination of hydrocarbons obtained from the distillation of the reaction products of propane with propylene. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-189-00-7	269-631-9	68308-11-2	H, K
Tail gas (petroleum), vacuum gas oil hydrodesulphuriser, hydrogen sulphide-free; Petroleum gas (A complex combination of hydrocarbons obtained from catalytic hydrodesulphurisation of vacuum gas oil and from which hydrogen sulphide has been removed by amine treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-190-00-2	269-632-4	68308-12-3	H, K
Gases (petroleum), catalytic cracked overheads; Petroleum gas (A complex combination of hydrocarbons produced by the	649-191-00-8	270-071-2	68409-99-4	H, K

▼M45

Substances	Index number	EC number	CAS number	Notes
distillation of products from the catalytic cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_3 through C_5 and boiling in the range of approximately –48 °C to 32 °C.)				
Alkanes, C_{1-2}; Petroleum gas	649-193-00-9	270-651-5	68475-57-0	H, K
Alkanes, C_{2-3}; Petroleum gas	649-194-00-4	270-652-0	68475-58-1	H, K
Alkanes, C_{3-4}; Petroleum gas	649-195-00-X	270-653-6	68475-59-2	H, K
Alkanes, C_{4-5}; Petroleum gas	649-196-00-5	270-654-1	68475-60-5	H, K
Fuel gases; Petroleum gas (A combination of light gases. It consists predominantly of hydrogen and/or low molecular weight hydrocarbons.)	649-197-00-0	270-667-2	68476-26-6	H, K
Fuel gases, crude oil of distillates; Petroleum gas (A complex combination of light gases produced by distillation of crude oil and by catalytic reforming of naphtha. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4 and boiling in the range of approximately –217 °C to –12 °C.)	649-198-00-6	270-670-9	68476-29-9	H, K
Hydrocarbons, C_{3-4}; Petroleum gas	649-199-00-1	270-681-9	68476-40-4	H, K
Hydrocarbons, C_{4-5}; Petroleum gas	649-200-00-5	270-682-4	68476-42-6	H, K
Hydrocarbons, C_{2-4}, C_3-rich; Petroleum gas	649-201-00-0	270-689-2	68476-49-3	H, K
Petroleum gases, liquefied; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_3 through C_7 and boiling in the range of approximately –40 °C to 80 °C.)	649-202-00-6	270-704-2	68476-85-7	H, K, S
Petroleum gases, liquefied, sweetened; Petroleum gas (A complex combination of hydrocarbons obtained by subjecting liquefied petroleum gas mix to a sweetening process to convert mercaptans or to remove acidic impurities.	649-203-00-1	270-705-8	68476-86-8	H, K, S

▼M45

Substances	Index number	EC number	CAS number	Notes
It consists of hydrocarbons having carbon numbers predominantly in the range of C_3 through C_7 and boiling in the range of approximately –40 °C to 80 °C.)				
Gases (petroleum), C_{3-4}, isobutane-rich; Petroleum gas (A complex combination of hydrocarbons from the distillation of saturated and unsaturated hydrocarbons usually ranging in carbon numbers from C_3 through C_6, predominantly butane and isobutane. It consists of saturated and unsaturated hydrocarbons having carbon numbers in the range of C_3 through C_4, predominantly isobutane.)	649-204-00-7	270-724-1	68477-33-8	H, K
Distillates (petroleum), C_{3-6}, piperylene-rich; Petroleum gas (A complex combination of hydrocarbons from the distillation of saturated and unsaturated aliphatic hydrocarbons usually ranging in the carbon numbers C_3 through C_6. It consists of saturated and unsaturated hydrocarbons having carbon numbers in the range of C_3 through C_6, predominantly piperylenes.)	649-205-00-2	270-726-2	68477-35-0	H, K
Gases (petroleum), butane splitter overheads; Petroleum gas (A complex combination of hydrocarbons obtained from the distillation of the butane stream. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_3 through C_4.)	649-206-00-8	270-750-3	68477-69-0	H, K
Gases (petroleum), C_{2-3}; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of products from a catalytic fractionation process. It contains predominantly ethane, ethylene, propane, and propylene.)	649-207-00-3	270-751-9	68477-70-3	H, K
Gases (petroleum), catalytic-cracked gas oil depropaniser bottoms, C_4-rich acid-free; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation of catalytic cracked gas oil hydrocarbon stream and treated to remove	649-208-00-9	270-752-4	68477-71-4	H, K

▼M45

Substances	Index number	EC number	CAS number	Notes
hydrogen sulphide and other acidic components. It consists of hydrocarbons having carbon numbers in the range of C_3 through C_5, predominantly C_4.)				
Gases (petroleum), catalytic-cracked naphtha debutaniser bottoms, C_{3-5}-rich; Petroleum gas (A complex combination of hydrocarbons obtained from the stabilisation of catalytic cracked naphtha. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_3 through C_5.)	649-209-00-4	270-754-5	68477-72-5	H, K
Tail gas (petroleum), isomerised naphtha fractionation stabiliser; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation stabilisation products from isomerised naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-210-00-X	269-628-2	68308-08-7	H, K

▼M23

Point 31 — Toxic for reproduction: category 1

Substances	Index number	EC number	CAS number	Notes
carbon monoxide	006-001-00-2	211-128-3	630-08-0	
lead hexafluorosilicate	009-014-00-1	247-278-1	25808-74-6	
▼M45 Lead compounds with the exception of those specified elsewhere in this Annex	082-001-00-6	—	—	A, E
Lead alkyls	082-002-00-1	—	—	A, E
▼M23 lead azide	082-003-00-7	236-542-1	13424-46-9	
lead chromate	082-004-00-2	231-846-0	7758-97-6	
lead di(acetate)	082-005-00-8	206-104-4	301-04-2	
trilead bis(orthophosphate)	082-006-00-3	231-205-5	7446-27-7	
lead acetate	082-007-00-9	215-630-3	1335-32-6	
lead(II) methanesulphonate	082-008-00-4	401-750-5	17570-76-2	

▼M23

Substances	Index number	EC number	CAS number	Notes
C.I. Pigment Yellow 34; (This substance is identified in the Colour Index by Colour Index Constitution Number, C. I. 77603.)	082-009-00-X	215-693-7	1344-37-2	
C.I. Pigment Red 104; (This substance is identified in the Colour Index by Colour Index Consititution Number, C. I. 77605.)	082-010-00-5	235-759-9	12656-85-8	
lead hydrogen arsenate	082-011-00-0	232-064-2	7784-40-9	
▼M25 1,2-Dibromo-3-chloropropane	602-021-00-6	202-479-3	96-12-8	
▼M37 2-bromopropane	602-085-00-5	200-855-1	75-26-3	E
▼M23 warfarin; 4-hydroxy-3-(3-oxo-1-phenylbutyl)coumarin	607-056-00-0	201-377-6	81-81-2	
lead 2,4,6-trinitroresorcinoxide, lead styphnate	609-019-00-4	239-290-0	15245-44-0	

Point 31 — Toxic for reproduction: category 2

Substances	Index number	EC number	CAS number	Notes
▼M45 Linuron (ISO); 3-(3,4-dichlorophenyl)-1-methoxy-1-methylurea	006-021-00-1	206-356-5	330-55-2	E
▼M27 6-(2-chloroethyl)-6(2-methoxyethoxy)-2,5,7,10-tetraoxa-6-silaundecane; etacelasil	014-014-00-X	253-704-7	37894-46-5	
▼M37 Flusilazole (ISO); bis(4-fluorophenyl)-(methyl)-(1H-1,2,4-triazol-1-ylmethyl)-silane	014-017-00-6	—	85509-19-9	E
A mixture of: 4-[[bis-(4-fluorophenyl)-methylsilyl]methyl]-4H-1,2,4-triazole; 1-[[bis-(4-fluorophenyl)methyl-silyl]methyl]-1H-1,2,4-triazole	014-019-00-7	403-250-2	—	E
▼M45 Potassium dichromate	024-002-00-6	231-906-6	7778-50-9	E

▼M45

Substances	Index number	EC number	CAS number	Notes
Ammonium dichromate	024-003-00-1	232-143-1	7789-09-5	E
Sodium dichromate, anhydrate	024-004-00-7	234-190-3	10588-01-9	E
Sodium dichromate, dihydrate	024-004-01-4	234-190-3	7789-12-0	E
Sodium chromate	024-018-00-3	231-889-5	7775-11-3	E
▼M23 nickel tetracarbonyl	028-001-00-1	236-669-2	13463-39-3	
▼M45 Cadmium fluoride	048-006-00-2	232-222-0	7790-79-6	E
Cadmium chloride	048-008-00-3	233-296-7	10108-64-2	E
Cadmium sulphate	048-009-00-9	233-331-6	10124-36-4	E
▼M23 benzo[a]pyrene; benzo[d,e,f] chrysene	601-032-00-3	200-028-5	50-32-8	
▼M45 1-bromopropane; Propyl bromide; n-propyl bromide	602-019-00-5	203-445-0	106-94-5	
1,2,3-trichloropropane	602-062-00-X	202-486-1	96-18-4	D
Diphenylether; octabromo derivate	602-094-00-4	251-087-9	32536-52-0	
▼M23 2-methoxyethanol; ethylene glycol monomethyl ether	603-011-00-4	203-713-7	109-86-4	
2-ethoxyethanol; ethylene glycol monoethyl ether	603-012-00-X	203-804-1	110-80-5	
▼M45 1,2-dimethoxyethane; ethylene glycol dimethyl ether; EGDME	603-031-00-3	203-794-9	110-71-4	
2,3-epoxypropan-1-ol; glycidol oxiranemethanol	603-063-00-8	209-128-3	556-52-5	E
▼M36 2-Methoxypropanol	603-106-00-0	216-455-5	1589-47-5	
▼M37 Bis(2-methoxyethyl) ether	603-139-00-0	203-924-4	111-96-6	

▼M37

Substances	Index number	EC number	CAS number	Notes
R-2,3-epoxy-1-propanol	603-143-002	404-660-4	57044-25-4	E
▼M45				
1,2-bis(2-methoxyethoxy)ethane; TEGDME; Triethylene glycol dimethyl ether; Triglyme	603-176-00-2	203-977-3	112-49-2	
▼M36				
4,4'-isobutylethylidenediphenol; 2,2-bis (4'-hydroxyphenyl)-4-methylpentane	604-024-00-8	401-720-1	6807-17-6	
▼M45				
Tetrahydrothiopyran-3-carboxaldehyde	606-062-00-0	407-330-8	61571-06-0	
▼M23				
2-methoxyethyl acetate; methylglycol acetate	607-036-00-1	203-772-9	110-49-6	
2-ethoxyethyl acetate; ethylglycol acetate	607-037-00-7	203-839-2	111-15-9	
2-ethylhexyl 3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl methyl thio acetate	607-203-00-9	279-452-8	80387-97-9	
▼M25				
bis(2-Methoxyethyl) phthalate	607-228-00-5	204-212-6	117-82-8	
▼M36				
2-Methoxypropyl acetate	607-251-00-0	274-724-2	70657-70-4	
▼M37				
Fluazifop-butyl (ISO); butyl (RS)-2-[4-(5-trifluoromethyl-2-pyridyloxy)phenoxy]propionate	607-304-00-8	274-125-6	69806-50-4	
Vinclozolin (ISO); N-3,5-Dichlorophenyl-5-methyl-5-vinyl-1,3-oxazolidine-2,4-dione	607-307-00-4	256-599-6	50471-44-8	
Methoxyacetic acid	607-312-00-1	210-894-6	625-45-6	E
Bis(2-ethylhexyl) phthalate; di-(2-ethylhexyl) phthalate; DEHP	607-317-00-9	204-211-0	117-81-7	
Dibutyl phthalate; DBP	607-318-00-4	201-557-4	84-74-2	

▼M37

Substances	Index number	EC number	CAS number	Notes
(+/-) tetrahydrofurfuryl (R)-2-[4-(6-chloroquinoxalin-2-yloxy) phenyloxy]propionate	607-373-00-4	414-200-4	119738-06-6	E

▼M45

1,2-benzenedicarboxylic acid, dipentylester, branched and linear (1); n-pentyl-isopentylphthalate (2); di-n-pentyl phthalate (3); Diisopentylphthalate (4)	607-426-00-1	284-032-2 (1)-(2) 205-017-9 (3)-(4)	84777-06-0 (1)-(2) 131-18-0 (3) 42925-80-4 (4)	
Benzyl butyl phthalate; BBP	607-430-00-3	201-622-7	85-68-7	
1,2-benzenedicarboxylic acid; di-C_7-11-branched and linear alkylesters	607-480-00-6	271-084-6	68515-42-4	
A mixture of disodium 4-(3-ethoxycarbonyl-4-(5-(3-ethoxy-carbonyl-5-hydroxy-1-(4-sulfo-natophenyl)pyrazol-4-yl)penta-2,4-dienylidene)-4,5-dihydro-5-oxopyrazol-1-yl)benzenesul-fonate; trisodium 4-(3-ethoxycarbonyl-4-(5-(3-ethoxycarbonyl-5-oxido-1-(4-sulfonatophenyl)pyrazol-4-yl)penta-2,4-dienylidene)-4,5-dihydro-5-oxopyrazol-1-yl) benzenesulfonate	607-487-00-4	402-660-9	—	
Dinocap (ISO)	609-023-00-6	254-408-0	39300-45-3	E

▼M23

binapacryl (ISO); 2-sec-butyl-4,6-dinitrophenyl-3-methylcro-tonate	609-024-00-1	207-612-9	485-31-4	
dinoseb; 6-sec-butyl-2,4-dinitro-phenol	609-025-00-7	201-861-7	88-85-7	
salts and esters of dinoseb, with the exception of those specified elsewhere in this Annex	609-026-00-2			
dinoterb; 2-tert-butyl-4,6-dinitro-phenol	609-030-00-4	215-813-8	1420-07-1	
salts and esters of dinoterb	609-031-00-X			
nitrofen (ISO); 2,4 dichloro-phenyl 4-nitrophenyl ether	609-040-00-9	217-406-0	1836-75-5	
methyl-ONN-azoxymethyl acetate; methyl azoxy methyl acetate	611-004-00-2	209-765-7	592-62-1	

▼M23

Substances	Index number	EC number	CAS number	Notes
▼M45				
2-(2-hydroxy-3-(2-chlorophenyl) carbamoyl-1-naphthylazo)-7-(2-hydroxy-3-(3-methylphenyl) carbamoyl-1-naphthylazo) fluoren-9-one	611-131-00-3	420-580-2	—	
Azafenidin	611-140-00-2	—	68049-83-2	
▼M36				
Tridemorph (ISO); 2,6-dimethyl-4-tridecylmorpholine	613-020-00-5	246-347-3	24602-86-6	
▼M23				
ethylene thiourea; imidazolidine-2-thione; 2-imidazoline-2-thiol	613-039-00-9	202-506-9	96-45-7	
▼M45				
Carbendazim (ISO); methyl benzimidazol-2-ylcarbamate	613-048-00-8	234-232-0	10605-21-7	
Benomyl (ISO); methyl 1-(butylcarbamoyl)benzimidazol-2-ylcarbamate	613-049-00-3	241-775-7	17804-35-2	
▼M36				
Cycloheximide	613-140-00-8	200-636-0	66-81-9	
▼M37				
Flumioxazin (ISO); N-(7-Fluoro-3,4-dihydro-3-oxo-4-prop-2-ynyl-2H-1,4-benzoxazin-6-yl)cyclohex-1-ene-1,2-dicarboxamide	613-166-00-X	—	103361-09-7	
(2RS,3RS)-3-(2-Chlorophenyl)-2-(4-fluorophenyl)-[(1H-1,2,4-triazol-1-yl)-methyl]oxirane	613-175-00-9	406-850-2	106325-08-0	
▼M45				
3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	613-191-00-6	421-150-7	143860-04-2	
A mixture of 1,3,5-tris(3-aminomethylphenyl)-1,3,5-(1H,3H,5H)-triazine-2,4,6-trione; a mixture of oligomers of 3,5-bis(3-aminomethylphenyl)-1-poly(3,5-bis(3-aminomethylphenyl)-2,4,6-trioxo-1,3,5-(1H,3H,5H)-triazin-1-yl)-1,3,5-(1H,3H,5H)-triazine-2,4,6-trione	613-199-00-X	421-550-1	—	
▼M23				
N,N-dimethylformamide; dimethyl formamide	616-001-00-X	200-679-5	68-12-2	

▼M23

Substances	Index number	EC number	CAS number	Notes
▼M37				
N, N-Dimethylacetamide	616-011-00-4	204-826-4	127-19-5	E
Formamide	616-052-00-8	200-842-0	75-12-7	
N-methylacetamide	616-053-00-3	201-182-6	79-16-3	
N-methylformamide	616-056-00-X	204-624-6	123-39-7	E

▼M34

Point 43 — Azocolourants

List of aromatic amines

	CAS number	Index number	EC number	Substances
1	92-67-1	612-072-00-6	202-177-1	biphenyl-4-ylamine 4-aminobiphenyl xenylamine
2	92-87-5	612-042-00-2	202-199-1	benzidine
3	95-69-2		202-441-6	4-chloro-o-toluidine
4	91-59-8	612-022-00-3	202-080-4	2-naphthylamine
5	97-56-3	611-006-00-3	202-591-2	o-aminoazotoluene 4-amino-2',3-dimethylazo-benzene 4-o-tolylazo-o-toluidine
6	99-55-8		202-765-8	5-nitro-o-toluidine
7	106-47-8	612-137-00-9	203-401-0	4-chloroaniline
8	615-05-4		210-406-1	4-methoxy-m-phenylenediamine
9	101-77-9	612-051-00-1	202-974-4	4,4'-methylenedianiline 4,4'-diaminodiphenylmethane
10	91-94-1	612-068-00-4	202-109-0	3,3'-dichlorobenzidine 3,3'-dichlorobiphenyl-4,4'-ylene-diamine
11	119-90-4	612-036-00-X	204-355-4	3,3'-dimethoxybenzidine o-dianisidine
12	119-93-7	612-041-00-7	204-358-0	3,3'-dimethylbenzidine 4,4'-bi-o-toluidine
13	838-88-0	612-085-00-7	212-658-8	4,4'-methylenedi-o-toluidine
14	120-71-8		204-419-1	6-methoxy-m-toluidine p-cresidine
15	101-14-4	612-078-00-9	202-918-9	4,4'-methylene-bis-(2-chloro-aniline) 2,2'-dichloro-4,4'-methylene-dianiline

▼M34

	CAS number	Index number	EC number	Substances
16	101-80-4		202-977-0	4,4'-oxydianiline
17	139-65-1		205-370-9	4,4'-thiodianiline
18	95-53-4	612-091-00-X	202-429-0	o-toluidine 2-aminotoluene
19	95-80-7	612-099-00-3	202-453-1	4-methyl-m-phenylenediamine
20	137-17-7		205-282-0	2,4,5-trimethylaniline
21	90-04-0	612-035-00-4	201-963-1	o-anisidine 2-methoxyaniline
22	60-09-3	611-008-00-4	200-453-6	4-amino azobenzene

List of azodyes

	CAS number	Index number	EC number	Substances
1	Not allocated Component 1: CAS-No.: 118685-33-9 $C_{39}H_{23}ClCrN_{7}O_{12}S.2Na$ Component 2: $C_{46}H_{30}CrN_{10}O_{20}S_{2}.3Na$	611-070-00-2	405-665-4	A mixture of: disodium (6-(4-anisidino)-3-sulfonato-2-(3,5-dinitro-2-oxidophenylazo)-1-naphtholato)(1-(5-chloro-2-oxidophenylazo)-2-naphtholato) chromate(1-); trisodium bis(6-(4-anisidino)-3-sulfonato-2-(3,5-dinitro-2-oxido-phenylazo)-1-naphtholato) chromate(1-)

▼M39

List of testing methods

European Standardisation Organisation (*)	Reference and title of the standard	Reference document	Reference of the superseded standard
CEN	Leather — Chemical tests — Determination of certain azo colourants in dyed leathers	CEN ISO/TS 17234:2003	NONE
CEN	Textiles — Methods for the determination of certain aromatic amines derived from azo colorants — Part 1: Detection of the use of certain azo colorants accessible without extraction	EN 14362-1:2003	NONE
CEN	Textiles — Methods for determination of certain aromatic amines derived from azo colorants — Part 2: Detection of the use of certain azo colorants accessible by extracting the fibres	EN 14362-2:2003	NONE

(*) ESO: European Standardisation Organisations:
CEN: rue de Stassart 36, B-1050 Bruxelles; tel. (32-2) 550 08 11, fax: (32-2) 550 08 19. http://www.cenorm.be
CENELEC: rue de Stassart 35, B-1050 Bruxelles; tel. (32-2) 519 68 71, fax: (32-2) 519 69 19. http://www.cenelec.org
ETSI: 650, route des Lucioles, F-06921 Sophia Antipolis; tel. (33) 492 94 42 00, fax: (33) 493 65 47 16. http://www.etsi.org

▼M5

ANNEX II

►M6 A. **◄ Special provisions on the labelling of products containing asbestos**

1. All products containing asbestos or the packaging thereof shall bear the label defined as follows

   (a) the label conforming to the specimen below shall be at least 5 cm high (H) and 2,5 cm wide;

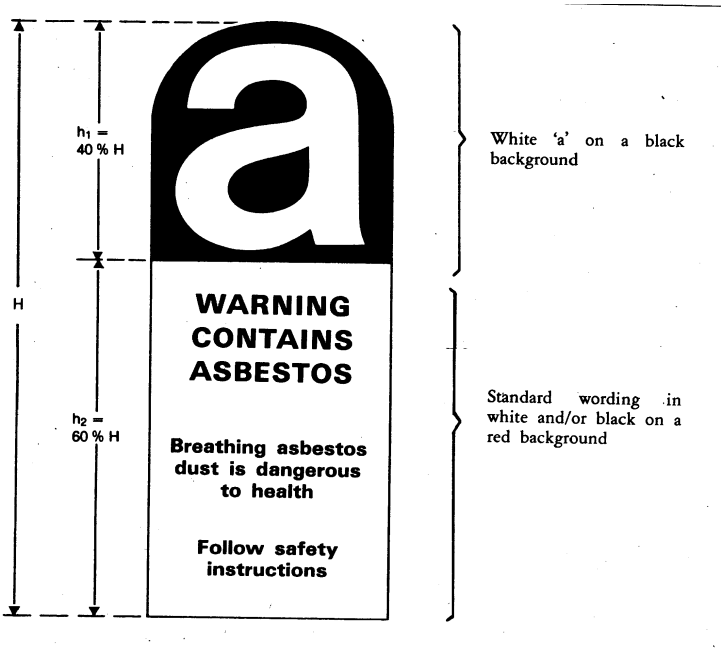
   (b) it shall consist of two parts:

   — the top part (h_1 = 40 % H) shall include the letter 'a' in white, on a black background,

   — the bottom part (h_2= 60 % H) shall include the standard wording in white and/or black, on a red background, and shall be clearly legible;

   (c) if the product contains crocidolite, the words 'contains asbestos' used in the standard wording shall be replaced by 'contains crocidolite/blue asbestos'.

   Member States may exclude from the provision of the first subparagraph hereof products intended to be placed on the market in their territory. The labelling of these products must however bear the wording 'contains asbestos';



   (d) if labelling takes the form of direct printing on the products, a single colour contrasting with the background colour is sufficient.

2. The label mentioned in this Annex shall be affixed in accordance with the following rules:

   (a) on each of the smallest units supplied;

   (b) if a product has asbestos-based components, it is sufficient for these components only to bear the label. The labelling may be dispensed with if smallness of size or unsuitability of packaging make it impossible for a label to be affixed to the component.

3. *Labelling of packaged products containing asbestos*

3.1. The following particulars shall appear on clearly legible and indelible labelling on the packaging of packaged products containing asbestos:

   (a) the symbol and relevant indications of danger in accordance with this Annex;

▼M5

(b) safety instructions which must be selected in accordance with the particulars in this Annex, inasmuch as they are relevant for the particular product.

Where additional safety information is provided on the packaging, this shall not weaken or contradict the particulars given in accordance with (a) and (b).

3.2. Labelling in accordance with 3.1 shall be effected by means of:

— a label firmly affixed to the packaging, or

— a (tie-on) label securely attached to the package, or

— direct printing of the packaging.

3.3. Products containing asbestos and which are packaged only in loose plastic wrapping or the like shall be regarded as packaged products and shall be labelled in accordance with 3.2. If products are separated from such packages and placed on the market unpackaged, each of the smallest units supplied shall be accompanied by labelling particulars in accordance with 3.1.

4. *Labelling of unpackaged products containing asbestos*

For unpackaged products containing asbestos, labelling in accordance with 3.1 shall be effected by means of:

— a label firmly affixed to the product containing asbestos,

— a (tie-on) label securely attached to such product,

— direct printing on the products,

or, if the abovementioned is not reasonably practicable as in the case of, for example, smallness of size of the product, the unsuitable nature of the product's properties or certain technical difficulties by means of a hand-out with labelling in accordance with 3.1.

5. Without prejudice to Community provisions on safety and hygiene at work, the label affixed to the product which may, in the context of its use, be processed or finished, should be accompanied by any safety instructions which may be appropriate for the product concerned, and in particular by the following:

— operate if possible out of doors or in a well-ventilated place,

— preferably use hand tools or low-speed tools equipped, if necessary, with an appropriate dust-extraction facility. If high-speed tools are used, they should always be equipped with such a facility,

— if possible, dampen before cutting or drilling,

— dampen dust and place it in a properly closed receptacle and dispose of it safely.

6. The labelling of any product intended for domestic use which is not covered by 5 and which is likely, during use, to release asbestos fibres should, if necessary, contain the following safety instruction: ‘replace when worn’.

7. Member States may make the placing on the market in their territory of products containing asbestos subject to the use of their official language or languages on the labelling.

▼M6

B. **Specific provisions relating to the labelling of products containing PCBs and PCTs**

Without prejudice to the provisions of other Directives relating to the labelling of dangerous substances and preparations, Member States may require equipment and plant containing PCBs or PCTs also to display instructions concerning the disposal of PCBs and PCTs and the maintenance and use of equipment and plant containing them. These instructions must be capable of being read horizontally when the object containing the PCBs or PCTs is installed in the normal way. The inscription must stand out clearly from its background.

Member States may require the inscription to be in a language which is understood in their territory.