Commission Regulation (EU) No 109/2012 of 9 February 2012 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as regards Annex XVII (CMR substances) (Text with EEA relevance)

# COMMISSION REGULATION (EU) No 109/2012

# of 9 February 2012

## amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as regards Annex XVII (CMR substances)

## (Text with EEA relevance)

## THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/ EEC, 93/67/EEC, 93/105/EC and 2000/21/EC<sup>(1)</sup>, and in particular Article 68(2) thereof,

Whereas:

- (1) Annex XVII to Regulation (EC) No 1907/2006, in its entries 28 to 30, prohibits the sale to the general public of substances that are classified as carcinogenic, mutagenic or toxic for reproduction (CMR), categories 1A or 1B or of mixtures containing them in concentration above specified concentration limits. The substances concerned are listed in Appendices 1 to 6 to Annex XVII.
- (2) Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006<sup>(2)</sup> was amended on 5 September 2009 by Commission Regulation (EC) No 790/2009<sup>(3)</sup> in order to include a number of newly classified CMR substances. Appendices 1 to 6 to Annex XVII to Regulation (EC) No 1907/2006 should be amended in order to align them to the entries concerning CMR substances in Regulation (EC) No 790/2009.
- (3) Under Article 68 (2) of Regulation (EC) No 1907/2006, restrictions may be proposed on the consumer use of CMR substances categories 1A and 1B on their own, in a mixture or in an article.
- (4) A number of boron compounds were found to be toxic for reproduction and were classified as toxic for reproduction, hazard class and category Repr. 1B, hazard

statement H360FD under the Regulation (EC) No 790/2009. A market survey conducted for the Commission<sup>(4)</sup> on the uses of borates in mixtures sold to the general public reported that sodium perborate, tetra and monohydrate, are used in a concentration exceeding their specific concentration limit specified in Regulation (EC) No 790/2009 in household detergents and cleaners.

- (5) On 29 April 2010, the Risk Assessment Committee (RAC) of the European Chemicals Agency (ECHA) gave an opinion on the use of boron compounds in photographic applications<sup>(5)</sup>. In its opinion, the RAC noted that there were 'more possible sources that contribute to the total exposure to boron of consumers', and that these 'additional sources have to be considered in the risk assessment of boron compounds'. Multiple sources of exposure to boron of consumers were not considered in previous risk assessments, in contrast with current concerns with multiple sources of exposure in general.
- (6)Sodium perborate, tetra and monohydrate, are mainly used as bleaching agents in laundry detergents and machine dishwashing products. The Rapporteur Member State, responsible for conducting the risk evaluation on sodium perborate under Council Regulation (EEC) No 793/93 of 23 March 1993 on the evaluation and control of the risks of existing substances<sup>(6)</sup>, submitted a dossier in accordance with Annex XV of Regulation (EC) No 1907/2006 to the European Chemicals Agency pursuant to Article 136 of that Regulation. That risk assessment, published in 2007, concluded that the use of sodium perborate in laundry detergents and household cleaners, considered in isolation as a single source of exposure to boron, did not pose an unacceptable risk to the general public. Nevertheless, because the sources of exposure of the general public to boron are multiple, as expressed in the 2010 opinion of the RAC, and due to its reproductive toxicity it is desirable to reduce the exposure of the general public to boron. Moreover, because the consumer population exposed to boron from household detergents and cleaners is considerable, and because alternatives to perborates are available in these applications, it is appropriate to restrict the use of perborates in household detergents and cleaners. However, in order to allow certain manufacturers to adapt and replace, where necessary, boron compounds with alternatives in these applications, a time-limited derogation should be granted.
- (7) The measures provided for in this Regulation are in accordance with the opinion of the Committee established under Article 133 of Regulation (EC) No 1907/2006,

## HAS ADOPTED THIS REGULATION:

#### Article 1

Annex XVII to Regulation (EC) No 1907/2006 is amended in accordance with the Annex to this Regulation.

#### Article 2

This Regulation shall enter into force on the 20th day following its publication in the *Official Journal of the European Union*.

It shall apply on 1 June 2012.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 9 February 2012.

For the Commission The President José Manuel BARROSO

#### ANNEX

Annex XVII to Regulation (EC) No 1907/2006 is amended as follows:

- (1) In the table setting out the designation of the substances, groups of substances and mixtures and the conditions of restriction, in Column 2 of entries 28, 29 and 30, in paragraph 2, the following point (e) is added:
  - (e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date.
- (2) In the Appendices 1 to 6, in the foreword, a note B is inserted between note A and note C, as follows: *Note B*:

Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations.

- (3) In Appendix 1 the table is amended as follows:
  - (a) The following entries are inserted in accordance with the order of the entries set out in Appendix 1 of Annex XVII of Regulation (EC) No 1907/2006:

	1	1		
Nickel dihydroxide; [1]	028-008-00- X	235-008-5 [1]	12054-48-7 [1]	
Nickel hydroxide; [2]		234-348-1 [2]	11113-74-9 [2]	
Nickel sulfate	028-009-00-5	232-104-9	7786-81-4	
Nickel carbonate;	028-010-00-0			
Basic nickel carbonate;				
Carbonic acid, nickel (2+) salt; [1]		222-068-2 [1]	3333-67-3 [1]	
Carbonic acid, nickel salt; [2]	-	240-408-8 [2]	16337-84-1 [2]	
[μ- [carbonato(2-) O:O']] dihydroxy trinickel; [3]	)- 	265-748-4 [3]	65405-96-1 [3]	

[carbonato(2-) tetrahydroxytr [4]		235-715-9 [4]	12607-70-4 [4]	
Nickel dichloride	028-011-00-6	231-743-0	7718-54-9	
Nickel dinitrate; [1]	028-012-00-1	236-068-5 [1]	13138-45-9 [1]	
Nitric acid, nickel salt; [2]		238-076-4 [2]	14216-75-2 [2]	
Nickel matte	028-013-00-7	273-749-6	69012-50-6	
Slimes and sludges, copper electrolytic refining, decopperised, nickel sulphate	028-014-00-2	295-859-3	92129-57-2	
Slimes and sludges, copper electrolyte refining, decopperised	028-015-00-8	305-433-1	94551-87-8	
Nickel diperchlorate; Perchloric acid, nickel (II) salt	028-016-00-3	237-124-1	13637-71-3	
Nickel dipotassium bis(sulfate); [1]	028-017-00-9	237-563-9 [1]	13842-46-1 [1]	
Diammonium nickel bis(sulfate); [2]		239-793-2 [2]	15699-18-0 [2]	
Nickel bis(sulfamidat Nickel sulfamate	028-018-00-4 e);	237-396-1	13770-89-3	
Nickel bis(tetrafluoro	028-019-00- b&rate)	238-753-4	14708-14-6	

Nickel diformate; [1]	028-021-00-0	222-101-0 [1]	3349-06-2 [1]	
Formic acid, nickel salt; [2]		239-946-6 [2]	15843-02-4 [2]	
Formic acid, copper nickel salt; [3]		268-755-0 [3]	68134-59-8 [3]	
Nickel di(acetate); [1]	028-022-00-6	206-761-7 [1]	373-02-4 [1]	
Nickel acetate; [2]		239-086-1 [2]	14998-37-9 [2]	
Nickel dibenzoate	028-024-00-7	209-046-8	553-71-9	
Nickel bis(4- cyclohexylbut	028-025-00-2 yrate)	223-463-2	3906-55-6	
Nickel (II) stearate; Nickel (II) octadecanoate	028-026-00-8	218-744-1	2223-95-2	
Nickel dilactate	028-027-00-3		16039-61-5	
Nickel (II) octanoate	028-028-00-9	225-656-7	4995-91-9	
Nickel difluoride; [1]	028-029-00-4	233-071-3 [1]	10028-18-9 [1]	
Nickel dibromide; [2]		236-665-0 [2]	13462-88-9 [2]	
Nickel diiodide; [3]		236-666-6 [3]	13462-90-3 [3]	
Nickel potassium fluoride; [4]		- [4]	11132-10-8 [4]	
Nickel hexafluorosilio	028-030-00- cate	247-430-7	26043-11-8	
Nickel selenate	028-031-00-5	239-125-2	15060-62-5	
Nickel hydrogen	028-032-00-0	238-278-2 [1]	14332-34-4 [1]	

phosphate; [1]			
Nickel bis(dihydrogen phosphate); [2]	n	242-522-3 [2]	18718-11-1 [2]
Trinickel bis(orthophosj [3]	phate);	233-844-5 [3]	10381-36-9 [3]
Dinickel diphosphate; [4]		238-426-6 [4]	14448-18-1 [4]
Nickel bis(phosphina [5]	te);	238-511-8 [5]	14507-36-9 [5]
Nickel phosphinate; [6]		252-840-4 [6]	36026-88-7 [6]
Phosphoric acid, calcium nickel salt; [7]		- [7]	17169-61-8 [7]
Diphosphoric acid, nickel (II) salt; [8]		- [8]	19372-20-4 [8]
Diammonium nickel hexacyanoferr	028-033-00-6 ate		74195-78-1
Nickel dicyanide	028-034-00-1	209-160-8	557-19-7
Nickel chromate	028-035-00-7	238-766-5	14721-18-7
Nickel (II) silicate; [1]	028-036-00-2	244-578-4 [1]	21784-78-1 [1]
Dinickel orthosilicate; [2]		237-411-1 [2]	13775-54-7 [2]
Nickel silicate (3:4); [3]		250-788-7 [3]	31748-25-1 [3]
Silicic acid, nickel salt; [4]		253-461-7 [4]	37321-15-6 [4]

	1		r	1
Trihydrogen hydroxybis[or [5]	thosilicato(4-)]	235-688-3 ttft5j]ckelate(3-);	12519-85-6 [5]	
Dinickel hexacyanoferr	028-037-00-8 ate	238-946-3	14874-78-3	
Trinickel bis(arsenate); Nickel (II) arsenate	028-038-00-3	236-771-7	13477-70-8	
Nickel oxalate; [1]	028-039-00-9	208-933-7 [1]	547-67-1 [1]	
Oxalic acid, nickel salt; [2]		243-867-2 [2]	20543-06-0 [2]	
Nickel telluride	028-040-00-4	235-260-6	12142-88-0	
Trinickel tetrasulfide	028-041-00- X		12137-12-1	
Trinickel bis(arsenite)	028-042-00-5	—	74646-29-0	
Cobalt nickel gray periclase;	028-043-00-0			
C.I. Pigment Black 25;				
C.I. 77332; [1]		269-051-6 [1]	68186-89-0 [1]	
Cobalt nickel dioxide; [2]		261-346-8 [2]	58591-45-0 [2]	
Cobalt nickel oxide; [3]		- [3]	12737-30-3 [3]	
Nickel tin trioxide; Nickel stannate	028-044-00-6	234-824-9	12035-38-0	
Nickel triuranium decaoxide	028-045-00-1	239-876-6	15780-33-3	
Nickel dithiocyanate	028-046-00-7	237-205-1	13689-92-4	
Nickel dichromate	028-047-00-2	239-646-5	15586-38-6	

Nickel (II) selenite	028-048-00-8	233-263-7	10101-96-9	
Nickel selenide	028-049-00-3	215-216-2	1314-05-2	
Silicic acid, lead nickel salt	028-050-00-9		68130-19-8	
Nickel diarsenide; [1]	028-051-00-4	235-103-1 [1]	12068-61-0 [1]	
Nickel arsenide; [2]		248-169-1 [2]	27016-75-7 [2]	
Nickel barium titanium primrose priderite;	028-052-00- X	271-853-6	68610-24-2	
C.I. Pigment Yellow 157;				
C.I. 77900				
Nickel dichlorate; [1]	028-053-00-5	267-897-0 [1]	67952-43-6 [1]	
Nickel dibromate; [2]		238-596-1 [2]	14550-87-9 [2]	
Ethyl hydrogen sulfate, nickel (II) salt; [3]		275-897-7 [3]	71720-48-4 [3]	
Nickel (II) trifluoroacetat [1]	028-054-00-0 e;	240-235-8 [1]	16083-14-0 [1]	
Nickel (II) propionate; [2]		222-102-6 [2]	3349-08-4 [2]	
Nickel bis(benzenesu [3]	lfonate);	254-642-3 [3]	39819-65-3 [3]	
Nickel (II) hydrogen citrate; [4]		242-533-3 [4]	18721-51-2 [4]	

Citric acid, ammonium nickel salt; [5]		242-161-1 [5]	18283-82-4 [5]
Citric acid, nickel salt; [6]		245-119-0 [6]	22605-92-1 [6]
Nickel bis(2- ethylhexanoate [7]	e);	224-699-9 [7]	4454-16-4 [7]
2- Ethylhexanoic acid, nickel salt; [8]		231-480-1 [8]	7580-31-6 [8]
Dimethylhexa acid nickel salt; [9]	noic	301-323-2 [9]	93983-68-7 [9]
Nickel (II) isooctanoate; [10]		249-555-2 [10]	29317-63-3 [10]
Nickel isooctanoate; [11]		248-585-3 [11]	27637-46-3 [11]
Nickel bis(isononanoa [12]	ate);	284-349-6 [12]	84852-37-9 [12]
Nickel (II) neononanoate; [13]		300-094-6 [13]	93920-10-6 [13]
Nickel (II) isodecanoate; [14]		287-468-1 [14]	85508-43-6 [14]
Nickel (II) neodecanoate; [15]		287-469-7 [15]	85508-44-7 [15]
Neodecanoic acid, nickel salt; [16]		257-447-1 [16]	51818-56-5 [16]
Nickel (II) neoundecanoa [17]	te;	300-093-0 [17]	93920-09-3 [17]
Bis(D- gluconato- O <sup>1</sup> ,O <sup>2</sup> )nickel; [18]		276-205-6 [18]	71957-07-8 [18]

Nickel 3,5- bis(tert- butyl)-4- hydroxybenzo (1:2); [19]	ate	258-051-1 [19]	52625-25-9 [19]
Nickel (II) palmitate; [20]		237-138-8 [20]	13654-40-5 [20]
(2- ethylhexanoat O) (isononanoato O)nickel; [21]		287-470-2 [21]	85508-45-8 [21]
(isononanoato O) (isooctanoato- O)nickel; [22]		287-471-8 [22]	85508-46-9 [22]
(isooctanoato- O) (neodecanoato O)nickel; [23]		284-347-5 [23]	84852-35-7 [23]
(2ethylhexano O) (isodecanoato- O)nickel; [24]		284-351-7 [24]	84852-39-1 [24]
(2- ethylhexanoat O) (neodecanoatc O)nickel; [25]		285-698-7 [25]	85135-77-9 [25]
(isodecanoato- O) (isooctanoato- O)nickel; [26]		285-909-2 [26]	85166-19-4 [26]
(isodecanoato O) (isononanoato O)nickel; [27]		284-348-0 [27]	84852-36-8 [27]
(isononanoato O) (neodecanoato		287-592-6 [28]	85551-28-6 [28]

O)nickel; [28]			
Fatty acids, C <sub>6-19</sub> - branched, nickel salts; [29]	-	294-302-1 [29]	91697-41-5 [29]
Fatty acids, $C_{8-18}$ and $C_{18}$ - unsaturated, nickel salts; [30]		283-972-0 [30]	84776-45-4 [30]
2,7- Naphthalenedi acid, nickel (II) salt; [31]	isulfonic	- [31]	72319-19-8 [31]
Nickel (II) sulfite; [1]	028-055-00-6	231-827-7 [1]	7757-95-1 [1]
Nickel tellurium trioxide; [2]		239-967-0 [2]	15851-52-2 [2]
Nickel tellurium tetraoxide; [3]		239-974-9 [3]	15852-21-8 [3]
Molybdenum nickel hydroxide oxide phosphate; [4]		268-585-7 [4]	68130-36-9 [4]
Nickel boride (NiB); [1]	028-056-00-1	234-493-0 [1]	12007-00-0 [1]
Dinickel boride; [2]		234-494-6 [2]	12007-01-1 [2]
Trinickel boride; [3]		234-495-1 [3]	12007-02-2 [3]
Nickel boride; [4]		235-723-2 [4]	12619-90-8 [4]
Dinickel silicide; [5]		235-033-1 [5]	12059-14-2 [5]
Nickel disilicide; [6]		235-379-3 [6]	12201-89-7 [6]

Dinickel phosphide; [7]		234-828-0 [7]	12035-64-2 [7]	
Nickel boron phosphide; [8]		- [8]	65229-23-4 [8]	
Dialuminium nickel tetraoxide; [1]	028-057-00-7	234-454-8 [1]	12004-35-2 [1]	
Nickel titanium trioxide; [2]		234-825-4 [2]	12035-39-1 [2]	
Nickel titanium oxide; [3]		235-752-0 [3]	12653-76-8 [3]	
Nickel divanadium hexaoxide; [4]		257-970-5 [4]	52502-12-2 [4]	
Cobalt dimolybdenum nickel octaoxide; [5]	n	268-169-5 [5]	68016-03-5 [5]	
Nickel zirkonium trioxide; [6]		274-755-1 [6]	70692-93-2 [6]	
Molybdenum nickel tetraoxide; [7]		238-034-5 [7]	14177-55-0 [7]	-
Nickel tungsten tetraoxide; [8]		238-032-4 [8]	14177-51-6 [8]	
Olivine, nickel green; [9]		271-112-7 [9]	68515-84-4 [9]	
Lithium nickel dioxide; [10]		- [10]	12031-65-1 [10]	
Molybdenum nickel oxide; [11]		- [11]	12673-58-4 [11]	

Cobalt lithium nickel oxide	028-058-00-2	442-750-5		
Hydrocarbons C <sub>4</sub> , 1,3- butadiene- and isobutene- free; Petroleum gas	,649-118-00- X	306-004-1	95465-89-7	K

(b) The following entries 028-003-00-2; 028-004-00-8; 028-005-00-3; 028-006-00-9; 028-007-00-4; 033-005-00-1; 603-046-00-5 are replaced by:

Nickel monoxide; [1]	028-003-00-2	215-215-7 [1]	1313-99-1 [1]	
Nickel oxide; [2]		234-323-5 [2]	11099-02-8 [2]	
Bunsenite; [3]		- [3]	34492-97-2 [3]	-
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 (II) sulfide; [1]	028-006-00-9	240-841-2 [1]	16812-54-7 [1]	
Nickel sulfide; [2]		234-349-7 [2]	11113-75-0 [2]	
Millerite; [3]		- [3]	1314-04-1 [3]	-
Trinickel disulfide;	028-007-00-4			
Nickel subsulfide; [1]		234-829-6 [1]	12035-72-2 [1]	-
Heazlewoodite [2]	;	- [2]	12035-71-1 [2]	-
Arsenic acid and its salts with the exception of those specified	033-005-00-1			A

\_

elsewhere in this Annex				
Bis(chloromet Oxybis(chloro	h <b>50)&amp;0146;</b> 00-5 methane)	208-832-8	542-88-1	

- (4) In Appendix 2 the Table is amended as follows:
  - (a) The following entries are deleted: 024-004-01-4; 649-118-00-X;
  - (b) The following entries are inserted in accordance with the order of the entries set out in Appendix 2 of Annex XVII of Regulation (EC) No 1907/2006:

O-isobutyl- N-ethoxy carbonylthioca	006-094-00- X arbamate	434-350-4	103122-66-3	
O-hexyl-N- ethoxycarbony	006-102-00-1 Ithiocarbamate	432-750-3		
Diethyl(2- (hydroxymeth	015-196-00-3 ylcarbamoyl)et ylcarbamoyl)et	hyl)phosphona		
Methyl ethyl(2- (hydroxymeth	ylcarbamoyl)et	hyl)phosphona	te	
Cobalt acetate	027-006-00-6	200-755-8	71-48-7	<u> </u>
Cobalt nitrate	027-009-00-2	233-402-1	10141-05-6	
Cobalt carbonate	027-010-00-8	208-169-4	513-79-1	
Lead chromate	082-004-00-2	231-846-0	7758-97-6	
Lead sulfochromate yellow; 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	

Lead chromate molybdate sulfate red; C.I. Pigment Red 104; [This substance is identified in the Colour Index by Colour Index Constitution Number, C.I. 77605.]	082-010-00-5		12656-85-8	
2,3- Epoxypropyltr chloride %; Glycidyl trimethylamm chloride%	603-211-00-1 imethylammor onium		3033-77-0	B
1-(2- amino-5- chlorophenyl) trifluoro-1,1- ethanediol, hydrochloride [containing < 0,1 % 4- chloroaniline (EC No 203-401-0)		433-580-2	214353-17-0	
Phenolphthale	i <b>6</b> 04-076-00-1	201-004-7	77-09-8	
Ethyl 1-(2,4- dichloropheny (trichlorometh triazole-3- carboxylate		401-290-5	103112-35-2	
N,N'- diacetylbenzid	612-044-00-3 ine	210-338-2	613-35-4	
Biphenyl-3,3', tetrayltetraami Diaminobenzi		202-110-6	91-95-2	
(2- chloroethyl) (3-	612-246-00-1	429-740-6	40722-80-3	

hydroxypropy chloride	l)ammonium			
3-Amino-9- ethyl carbazole; 9- Ethylcarbazol- ylamine	612-280-00-7 -3-	205-057-7	132-32-1	
Quinoline	613-281-00-5	202-051-6	91-22-5	
N-[6,9- dihydro-9- [[2- hydroxy-1- (hydroxymeth oxo-1H- purin-2- yl]acetamide	616-148-00- X yl)ethoxy]meth	424-550-1 yl]-6-	84245-12-5	
Distillates (coal tar), naphthalene oils; Naphthalene Oil; [A complex combination of hydrocarbons obtained by the distillation of coal tar. It consists primarily of aromatic and other hydrocarbons, phenolic compounds and aromatic nitrogen compounds and distills in the approximate range of 200 °C to 250 °C (392 °F to 482 °F).]	648-085-00-9	283-484-8	84650-04-4	J, M

	1		1	
Extract residues (coal), low temp. coal tar alk.; [The residue from low temperature coal tar oils after an alkaline wash, such as aqueous sodium hydroxide, to remove crude coal tar acids. Composed primarily of hydrocarbons and aromatic nitrogen bases.]	648-110-00-3	310-191-5	122384-78-5	J, M
Tar acids, coal, crude; Crude Phenols; [The reaction product obtained by neutralizing coal tar oil alkaline extract with an acidic solution, such as aqueous sulfuric acid, or gaseous carbon dioxide, to obtain the free acids. Composed primarily of tar acids such as phenol, cresols, and xylenols.]	648-116-00-6	266-019-3	65996-85-2	J, M

(c) The following entries 024-004-00-7; 609-007-00-9; 612-099-00-3; 612-151-00-5; 648-043-00-X; 648-080-00-1; 648-098-00-X; 648-099-00-5; 648-100-00-9; 648-102-00-X; 648-138-00-6; 650-017-00-8 are replaced by:

Sodium dichromate	024-004-00-7	234-190-3	10588-01-9	
2,4- Dinitrotoluene [1]	609-007-00-9 ;	204-450-0 [1]	121-14-2 [1]	
Dinitrotoluene [2]	.,	246-836-1 [2]	25321-14-6 [2]	
4-Methyl-m- phenylenedian 2,4- Toluenediamin		202-453-1	95-80-7	
Methyl- phenylene diamine; Diaminotoluen [technical product – reaction mass of 4- methyl-m- phenylene diamine (EC No 202-453-1 and 2- methyl-m- phenylene diamine (EC No 212-513-9	)			
Creosote oil, acenaphthene fraction, acenaphthene- free; Wash Oil Redistillate; [The oil remaining after removal by a crystallization process of acenaphthene from acenaphthene oil from		292-606-9	90640-85-0	М

coal tar. Composed primarily of naphthalene and alkylnaphthale	pnes.]			
Residues (coal tar), creosote oil distn.; Wash Oil Redistillate; [The residue from the fractional distillation of wash oil boiling in the approximate range of 270 °C to 330 °C (518 °F to 626 °F). It consists predominantly of dinuclear aromatic and heterocyclic hydrocarbons.		295-506-3	92061-93-3	М
Creosote oil, acenaphthene fraction; Wash Oil; [A complex combination of hydrocarbons produced by the distillation of coal tar and boiling in the range of approximately 240 °C to 280 °C (464 °F to 536 °F). Composed primarily of acenaphthene,		292-605-3	90640-84-9	М

naphthalene and alkyl naphthalene.]				
Creosote oil; [A complex combination of hydrocarbons obtained by the distillation of coal tar. It consists primarily of aromatic hydrocarbons and may contain appreciable quantities of tar acids and tar bases. It distills at the approximate range of 200 °C to 325 °C (392 °F to 617 °F).]	648-099-00-5	263-047-8	61789-28-4	М
Creosote oil, high-boiling distillate; Wash Oil; [The high- boiling distillation fraction obtained from the high temperature carbonization of bituminous coal which is further refined to remove excess crystalline salts. It consists primarily of	648-100-00-9	274-565-9	70321-79-8	М

creosote oil with some of the normal polynuclear aromatic salts, which are components of coal tar distillates, removed. It is crystal free at approximately 5 °C (41 °F).]				
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 (482 °F to 536 °F). It consists predominantly of biphenyl and isomeric diphenylnapht		310-189-4	122384-77-4	М
Creosote oil, low-boiling distillate; Wash Oil; [The low- boiling	648-138-00-6	274-566-4	70321-80-1	М

	1	1	1	1
distillation				
fraction				
obtained				
from the high				
temperature				
carbonization				
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				
(100 °F).]				
-				
Refractory	650-017-00-8			A, R
Ceramic				
Fibres,				
Special				
Purpose				
Fibres, with				
the exception				
of those				
specified				
elsewhere in				
this Annex;				
[Man-made				
vitreous				
(silicate)				
fibres with				
random orientation				
with alkaline				
oxide and				
UNITE alle				

alkali earth		
oxide (Na <sub>2</sub> O		
+K <sub>2</sub> O+CaO+		
MgO+BaO)		
content less		
or equal to		
18 % by		
weight]		

(5) In Appendix 4, the table is amended as follows:

- (a) The following entry is deleted: 024-004-01-4;
- (b) The following entries are inserted in accordance with the order of the entries set out in Appendix 4 of Annex XVII of Regulation (EC) No 1907/2006:

O-isobutyl- N-ethoxy carbonylthioca	006-094-00- X arbamate	434-350-4	103122-66-3	
O-hexyl-N- ethoxycarbony	006-102-00-1 Ithiocarbamate	432-750-3	_	
Diethyl(2- (hydroxymeth Methyl ethyl(2-	015-196-00-3 ylcarbamoyl)et ylcarbamoyl)et ylcarbamoyl)et	hyl)phosphona	te;	
2-Chloro-6- fluoro- phenol	604-082-00-4	433-890-8	2040-90-6	
(2- chloroethyl) (3- hydroxypropy chloride	612-246-00-1 l)ammonium	429-740-6	40722-80-3	
Colchicine	614-005-00-6	200-598-5	64-86-8	
N-[6,9- dihydro-9- [[2- hydroxy-1- (hydroxymeth oxo-1H- purin-2- yl]acetamide	616-148-00- X yl)ethoxy]meth	424-550-1 yl]-6-	84245-12-5	
Tar oils, brown-coal; Light Oil;	648-002-00-6	302-674-4	94114-40-6	J

[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.]				
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 <sub>4</sub> to C <sub>6</sub> 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	648-004-00-7	309-984-9	101896-26-8	J

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).]				
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	1
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;	648-009-00-4	292-636-2	90641-12-6	J

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.]				
Aromatic hydrocarbons, $C_8$ ; Light Oil Redistillate, high boiling	648-010-00- X	292-694-9	90989-38-1	J
Aromatic hydrocarbons, C <sub>8-9</sub> , 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		295-281-1	91995-20-9	J

numbers predominantly in the range of $C_8$ through $C_9$ and boiling in the range of approximately 120 °C to 215 °C (248 °F to 419 °F).]				
Aromatic hydrocarbons, C <sub>9-12</sub> , 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	648-014-00-1	295-323-9	91995-61-8	J

of benzene, toluene and xylenes.]			
Extract residues (coal tar), benzole fraction alk., acid 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 mononuclear aromatic hydrocarbons boiling in the range of 85 °C to 195 °C (185 °F to 383 °F).]	648-015-00-7	93821-38-6	J
residues (coal), benzole fraction acid; Light Oil Extract Residues, low boiling;			

[An acid sludge by- product of the sulfuric acid refining of crude high temperature coal. Composed primarily of sulfuric acid and organic compounds.]				
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 prefractionator bottoms or washed carbolic oil boiling substantially below 145 °C (293 °F). Composed primarily of C <sub>7</sub> and C <sub>8</sub> aliphatic and aromatic hydrocarbons.		292-625-2	90641-02-4	J
Extract residues (coal), light oil alk., acid	648-018-00-3	309-867-2	101316-62-5	J

ext., indene fraction; Light Oil Extract Residues, intermediate boiling				
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 trimethylbenze		292-626-8	90641-03-5	J
Solvent naphtha (coal); [The distillate from either high temperature coal tar,	648-020-00-4	266-013-0	65996-79-4	J

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.]; Light Oil				
Extract Residues, high boiling				
Distillates (coal tar),	648-021-00- X	309-971-8	101794-90-5	J
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.]				
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
Distillates (coal tar), light oils; Carbolic Oil; [A complex combination of hydrocarbons	648-023-00-0	283-483-2	84650-03-3	J

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).]				
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, alkylnaphthale phenolic compounds, and aromatic nitrogen bases.]		266-016-7	65996-82-9	J
Extract residues (coal), light oil alk., acid ext.; Carbolic Oil Extract Residue;	648-026-00-7	292-624-7	90641-01-3	J

[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	-			
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	648-028-00-8	292-622-6	90640-99-6	J

wash of alkali- washed carbolic oil. Composed primarily of acid salts of various aromatic nitrogen bases including pyridine, quinoline and their alkyl derivatives.]				
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) from the reaction of ammonia with acetaldehyde, formaldehyde or paraformaldeh		269-929-9	68391-11-7	J
Tar bases, coal, picoline fraction; Distillate Bases; [Pyridine bases boiling in the	648-030-00-9	295-548-2	92062-33-4	J

range of approximately 125 °C to 160 °C (257 °F to 320 °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.]				
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 acidic extraction of bases from crude coal tar aromatic oils, neutralization, and distillation of the bases. Composed primarily of collidines, aniline, toluidines,	648-032-00- X	273-077-3	68937-63-3	J

	648 033 00 5	205 5/3 5	92062 28 7	T
xylidines.] Tar bases, coal, collidine fraction; Distillate Bases; [The distillation fraction boiling in the range of approximately 181 °C to 186 °C (356 °F to 367 °F) from the crude bases obtained from the neutralized, acid- extracted base- containing tar fractions	648-033-00-5	295-543-5	92062-28-7	J
obtained by the distillation of bituminous coal tar. It contains chiefly aniline and collidines.]				
Tar bases, coal, aniline fraction; Distillate Bases; [The distillation fraction boiling in the range of approximately 180 °C to 200 °C (356 °F to 392 °F)	648-034-00-0	295-541-4	92062-27-6	J

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.]				
Tar bases, coal, toluidine fraction; Distillate Bases	648-035-00-6	293-767-8	91082-53-0	J
Distillates (petroleum), alkene- alkyne manuf. pyrolysis oil, mixed with high- temp. coal tar, indene fraction; Redistillates; [A complex combination of hydrocarbons obtained as a redistillate from the fractional distillation of bituminous coal high temperature tar and residual oils that are obtained by the pyrolytic production of	648-036-00-1	295-292-1	91995-31-2	J

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	648-038-00-2	295-329-1	91995-66-3	J

oils, naphthalene oil, redistillate; Redistillate; [The redistillate from the fractional distillation of dephenolated and debased methylnaphtha 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.	]			
Extract oils (coal), coal tar-residual pyrolysis oils, naphthalene oils; Redistillates; [A neutral oil obtained by debasing and dephenolating the oil obtained from the	648-039-00-8	310-170-0	122070-79-5	J

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.				
Extract oils (coal), coal tar residual pyrolysis oils, naphthalene oil, distn. residues; Redistillates; [Residue from the distillation of dephenolated and debased methylnaphtha oil (from bituminous coal tar and pyrolysis residual oils) with a boiling range of 240 °C to 260 °C (464 °F to 500 °F). Composed	648-040-00-3	310-171-6	122070-80-8	J
primarily of substituted dinuclear aromatic and heterocyclic hydrocarbons.	]			

Distillates	648-084-00-3	285-076-5	85029-51-2	J, M
(coal),				
coke-oven				
light oil,				
naphthalene				
cut;				
Naphthalene				
Oil;				
[The				
complex				
combination				
of				
hydrocarbons				
obtained				
from				
prefractionatio	n			
(continuous				
distillation)				
of coke oven				
light oil.				
It consists				
predominantly				
of				
naphthalene,				
coumarone				
and indene				
and boils				
above 148 °C				
(298 °F).]				
Distillates	648-085-00-9	283-484-8	84650-04-4	J, M
(coal tar),				
naphthalene				
oils;				
Naphthalene				
Oil;				
[A complex				
combination				
of				
hydrocarbons				
obtained				
by the				
distillation				
of coal tar.				
It consists				
primarily				
of aromatic				
and other				
hydrocarbons,				
phenolic				
compounds				
and aromatic				
nitrogen				

compounds and distills in the approximate range of 200 °C to 250 °C (392 °F to 482 °F).]				
Distillates (coal tar), naphthalene oils, naphthalene- low; Naphthalene Oil Redistillate; [A complex combination of hydrocarbons obtained by crystallization of naphthalene oil.Composed primarily of naphthalenes, 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	648-087-00- X	295-310-8	91995-49-2	J, M

fraction from coal tar and boiling in the range of approximately 200 °C to 230 °C (392 °F to 446 °F). Contains chiefly naphthalene, thionaphthale and alkylnaphthale				
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.]			121620-47-1	J, M
Extract residues (coal), naphthalene oil, alk., naphthalene- low; Naphthalene Oil Extract Residue;	648-089-00-0	310-167-4	121620-48-2	J, M

[A complex combination of hydrocarbons remaining after 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;	648-091-00-1	292-627-3	90641-04-6	J, M

Naphthalene Oil Extract Residue; [The distillate 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, alkylbenzeness indene and indan.]				
Distillates (coal tar), naphthalene oils, methylnaphtha fraction; Methylnaphtha 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	alene	309-985-4	101896-27-9	J, M

(437 °F to 491 °F).]				
Distillates (coal tar), naphthalene oils, indole- methylnaphtha fraction; Methylnaphth Oil; [A distillate from the fractional distillation of high temperature coal tar. Composed primarily of indole and methylnaphtha boiling in the range of approximately 235 °C to 255 °C (455 °F to 491 °F).]	alene	309-972-3	101794-91-6	J, M
Distillates (coal tar), naphthalene oils, acid exts.; Methylnaphth Oil Extract Residue; [A complex combination of hydrocarbons obtained by debasing the methylnaphtha fraction obtained by the distillation of coal tar and boiling in the range of approximately 230 °C	alene	295-309-2	91995-48-1	J, M

to 255 °C (446 °F to 491 °F). Contains chiefly 1(2)- methylnaphtha naphthalene, dimethylnapht and biphenyl.]			
Extract residues (coal), naphthalene oil alk., distn. residues; Methylnaphth 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, alkylnaphthale and aromatic nitrogen bases.]	292-628-9	90641-05-7	J, M
Extract oils (coal), acidic, tar- base free; Methylnaphth Oil Extract Residue; [The extract oil boiling in the range of approximately	284-901-6	84989-12-8	J, M

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 alkylnaphthale				
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	648-097-00-4	310-165-3	121620-46-0	J, M

up to 70 °C (158 °F). It is composed primarily of naphthalene and alkyl naphthalenes.]				
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.		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	648-104-00-0	292-604-8	90640-82-7	J, M

and four membered aromatic compounds.]				
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 polynuclear aromatic and heterocyclic hydrocarbons.		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	648-106-00-1	295-275-9	91995-15-2	J, M

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.				
Anthracene oil,	648-107-00-7	295-276-4	91995-16-3	J, M
anthracene paste,				
carbazole				
fraction;				
Anthracene				
Oil Fraction; [A complex				
combination				
of				
hydrocarbons				
from the				
distillation of anthracene				
obtained by				
crystallization				
of anthracene				
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.	1			
Anthracene	648-108-00-2	295-278-5	91995-17-4	J, M
oil,			<u>утууз-т/-</u> т	<b>v</b> , <b>11</b>
-	I	I.	ļ.	I

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				
high 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.]				
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	648-109-00-8	309-889-2	101316-87-4	J, M

approximately 160 °C to 340 °C (320 °F to 644 °F).]				
Extract residues (coal), low temp. coal tar alk.; [The residue from low temperature coal tar oils after an alkaline wash, such as aqueous sodium hydroxide, to remove crude coal tar acids. Composed primarily of hydrocarbons and aromatic nitrogen bases.]	648-110-00-3	310-191-5	122384-78-5	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 (1 292 °F)) destructive	648-111-00-9	284-881-9	84988-93-2	J, M

distillation of coal. It consists predominantly of a mixture of monohydric and dihydric phenols.]				
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
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 hydroxide. 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 <sub>2</sub> and CaO. Composed primarily of CaCO <sub>3</sub> , Ca(OH) <sub>2</sub> , Na <sub>2</sub> CO <sub>3</sub> and other organic and inorganic impurities.]	648-115-00-0	292-629-4	90641-06-8	J, M
Tar acids, coal, crude;	648-116-00-6	266-019-3	65996-85-2	J, M

Crude Phenols; [The reaction product obtained by neutralizing coal tar oil alkaline extract with an acidic solution, such as aqueous sulfuric acid, or gaseous carbon dioxide, to obtain the free acids. Composed primarily of tar acids such as phenol, cresols, and xylenols.]				
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	648-118-00-7	295-536-7	92062-22-1	J, M

gasification. Composed primarily of $C_{6-10}$ hydroxy aromatic phenols and their homologs.]				
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

Tar acids,	648-121-00-3	284-893-4	84989-05-9	J, M
lar acids, polyalkylphen fraction; Distillate Phenols; The fraction of tar acids, recovered by distillation of low- emperature coal tar crude rar acids, naving an approximate poiling range		284-893-4	84989-05-9	J, I <b>V</b> I
of 225 °C o 320 °C (437 °F to 508 °F). Composed orimarily of polyalkylphen	ols.]			
Tar acids, xylenol fraction; Distillate Phenols; [The fraction of tar acids, rich in 2,4- and 2,5- dimethylpheno 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	648-123-00-4	284-891-3	84989-03-7	J, M

of low- temperature coal tar crude tar acids.]				
Tar acids, 3,5-xylenol fraction; Distillate Phenols; [The fraction of tar acids, rich in 3,5- dimethylphenor 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	648-126-00-0	271-418-0	68555-24-8	J, M

solid with a melting point approximately 80 °C (176 °F). Composed primarily of polyalkylphen resin gums, and inorganic salts.]				
Phenols, C <sub>9-11</sub> ; 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.]			92062-26-5	J, M
Tar acids, brown- coal, C <sub>2</sub> - alkylphenol fraction; Distillate Phenols; [The distillate from the acidification of alkaline washed	648-129-00-7	302-662-9	94114-29-1	J, M

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.] Extract oils (coal), naphthalene oils:	648-130-00-2	292-623-1	90641-00-2	J, M
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.]	648 131 00 8	271 020 7	69512 97 1	
Tar bases, quinoline derivs.; Distillate Bases	648-131-00-8	271-020-7	68513-87-1	J, M
Tar bases, coal, quinoline	648-132-00-3	274-560-1	70321-67-4	J, M

derivs. fraction; Distillate Bases				
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 derivatives and toluidines.]	648-133-00-9	295-544-0	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	648-134-00-4	309-745-9	100801-63-6	J, M

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).]				
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).]		309-748-5	100801-65-8	J, M
Hydrocarbon oils, arom., mixed with polystyrene,	648-136-00-5	309-749-0	100801-66-9	J, M

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).]				
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	648-137-00-0	277-567-8	73665-18-6	J, M

hydrocarbons and aromatic nitrogen bases.]				
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	648-141-00-2	266-018-8	65996-84-1	J, M

base extract oil with an alkaline 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.]	<del>,</del>			
Light oil (coal), coke- oven; Crude benzole; [The volatile organic liquid extracted from the gas evolved in the high temperature (greater than 700 °C (1 292 °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.	648-148-00-0	302-688-0	94114-52-0	J

solvent extn., primary; [The liquid product of condensation of vapors emitted 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 <sub>4</sub> through C <sub>14</sub> .]				
Distillates (coal), solvent extn., hydrocracked; [Distillate obtained by hydrocracking of coal extract or solution produced by	648-149-00-6	302-689-6	94114-53-1	J

	I	I	1	1
the liquid				
solvent				
extraction or				
supercritical				
gas				
extraction				
processes				
and boiling				
in the				
range of				
approximately	,			
30 °C to				
300 °C				
$(86 \circ F to$				
572 °F).				
Composed				
primarily of				
aromatic,				
hydrogenated				
aromatic and				
naphthenic				
compounds,				
their alkyl				
derivatives				
and alkanes				
with carbon				
numbers				
predominantly	7			
in the				
range of C <sub>4</sub>				
through $C_{14}$ .				
Nitrogen,				
sulfur and				
oxygen-				
containing				
aromatic and				
hydrogenated				
aromatic				
compounds				
are also				
present.]				
Naphtha	648-150-00-1	302-690-1	94114-54-2	J
(coal),	010120001	502 090 1	51111512	5
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				
$30 ^{\circ}\mathrm{C}$ to				
180 °C				
$(86 \degree F to 256 \degree F)$				
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.]				
Distillates	648-152-00-2	302-692-2	94114-56-4	J
(coal),	0 10-132-00-2	502-072-2	J T I T - JU-T	5
solvent extn.,				
hydrocracked				
middle;				
[Distillate				
obtained				
from the				
hydrocracking				
of coal				
extract or				
		I	1	1

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 <sub>9</sub> through C <sub>14</sub> . Nitrogen, sulfur and oxygen- containing compounds				
compounds are also present.]				
Distillates (coal), solvent extn., hydrocracked hydrogenated middle; [Distillate from the hydrogenation of	648-153-00-8	302-693-8	94114-57-5	J

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 $180 \degree C$ to $280 \degree C$ ( $356 \degree F$ to $536 \degree F$ ). Composed primarily of hydrogenated two- ring carbon compounds and their alkyl derivatives having carbon numbers predominantly in the range of C <sub>9</sub> through C <sub>14</sub> .]				
Light oil (coal), semi- coking process; Fresh oil; [The volatile organic liquid condensed from the gas evolved in the low- temperature (less than	648-156-00-4	292-635-7	90641-11-5	J

700 °C (1 292 °F)) destructive distillation of coal. Composed primarily of C <sub>6-10</sub> hydrocarbons.				
Hydrocarbons C <sub>4</sub> , 1,3- butadiene- and isobutene- free; Petroleum gas	,649-118-00- X	306-004-1	95465-89-7	K
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 <sub>4</sub> through C <sub>8</sub> and boiling in the range of approximately minus 20 °C		232-349-1	8006-61-9	Р

to 120 °C (- 4 °F to 248 °F).]				
Naphtha; Low boiling point naphtha; [Refined, partly refined, or unrefined petroleum products produced 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).]			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	649-263-00-9	232-453-7	8032-32-4	P

(58 °F to 275 °F).]				
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 <sub>6</sub> through C <sub>12</sub> and boiling in the range of approximately 65 °C to 230 °C (149 °F to 446 °F).]			64741-41-9	Р
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	649-265-00- X	265-042-6	64741-42-0	P

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).]				
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).]		265-046-8	64741-46-4	Р
Solvent naphtha (petroleum), light aliph.;	649-267-00-0	265-192-2	64742-89-8	Р

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 $35 ^{\circ}$ C to $160 ^{\circ}$ C (95 $^{\circ}$ F to $320 ^{\circ}$ F).]				
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	649-268-00-6	270-077-5	68410-05-9	P

predominantly in the range of $C_2$ through $C_7$ and boiling in the range of approximately $- 88 \ ^{\circ}C$ to 99 $^{\circ}C$ $(- 127 \ ^{\circ}F$ to $210 \ ^{\circ}F).]$				
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 <sub>4</sub> through C <sub>11</sub> and boiling in the range of approximately -20 °C to 196 °C( $-4$ °F to 384 °F).]		271-025-4	68514-15-8	P
Gasoline, straight-run, topping- plant;	649-270-00-7	271-727-0	68606-11-1	Р

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).]			
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	272-186-3	68783-12-0	Р

230 °C (25 °F to 446 °F).]				
Distillates (petroleum), light straight- run gasoline fractionation stabilizer overheads; Low boiling point naphtha; [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 <sub>3</sub> through C <sub>6</sub> .]			68921-08-4	P
Naphtha (petroleum), heavy straight run, aromcontg.; Low boiling point naphtha; [A complex combination of hydrocarbons obtained from a distillation process of crude petroleum.	649-273-00-3	309-945-6	101631-20-3	P

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).]				
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 <sub>3</sub> through C <sub>5</sub> . It consists of predominantly branched chain saturated hydrocarbons having carbon numbers	649-274-00-9	265-066-7	64741-64-6	P

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).]			
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	265-067-2	64741-65-7	P

boiling in the range of approximately 150 °C to 220 °C (302 °F to 428 °F).]			
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 <sub>3</sub> through C <sub>5</sub> . It consists of predominantly branched chain saturated hydrocarbons having carbon numbers predominantly branched chain saturated hydrocarbons having carbon numbers predominantly in the range of C <sub>7</sub> through C <sub>10</sub> and boiling in the range of approximately 90 °C to 160 °C	265-068-8	64741-66-8	Р

(194 °F to 320 °F).]				
Naphtha (petroleum), isomerization; Low boiling point modified naphtha; [A complex combination of hydrocarbons obtained from catalytic isomerization of straight chain paraffinic C <sub>4</sub> through C <sub>6</sub> hydrocarbons. It consists predominantly of saturated hydrocarbons such as isobutane, isopentane, 2,2- dimethylbutan 2- methylpentane	e, , ;.]		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	649-278-00-0	265-086-6	64741-84-0	Р

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).]			
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 <sub>7</sub> through C <sub>12</sub> and boiling in	265-095-5	64741-92-0	Р

the range of approximately 90 °C to 230 °C (194 °F to 446 °F).]				
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 <sub>6</sub> through C <sub>9</sub> .]			68410-71-9	P
Raffinates (petroleum), reformer, Lurgi unit- sepd.; Low boiling point modified naphtha; [The complex	649-281-00-7	270-349-3	68425-35-4	Ρ

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 $C_8$ .]				
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	649-282-00-2	271-267-0	68527-27-5	P

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).]				
Distillates (petroleum), naphtha steam cracking- derived, solvent- refined light hydrotreated; Low boiling point modified naphtha; [A complex combination of hydrocarbons obtained as the raffinates from a solvent extraction process of hydrotreated light distillate from steam-	649-283-00-8	295-315-5	91995-53-8	Р

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 $410 \ ^{F}$ ).]		295-430-0	92045-49-3	P
Hydrocarbons hydrotreated light naphtha distillates, solvent- refined; Low boiling point modified naphtha;	,649-285-00-9	290-430-3	92043-33-1	r

[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).]			
Naphtha (petroleum), isomerization, C <sub>6</sub> -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	295-440-5	92045-58-4	P

60 °C	I	I	I	I
to 66 °C				
(140 °F to				
151 °F).]				
Hydrocarbons	649-287-00-	295-446-8	92045-64-2	Р
C <sub>6-7</sub> ,	X			
naphtha-				
cracking,				
solvent-				
refined;				
Low boiling				
point modified				
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	od			
prehydrogenat cracked	eu			
naphtha.				
It consists				
predominantly				
of paraffinic				
and				
naphthenic				
hydrocarbons having				
carbon				
numbers				
predominantly	7			
in the				
range of				
$C_6$ through				
$C_7$ and				
boiling in				
the range of				
approximately 70 °C to				
	I			1

100 °C (158 °F to 212 °F).]				
C <sub>6</sub> -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).]			101316-67-0	Р
Naphtha (petroleum), heavy catalytic cracked; Low boiling point cat- cracked naphtha; [A complex combination of hydrocarbons produced by a distillation	649-289-00-0	265-055-7	64741-54-4	P

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.	] 649-290-00-6	265-056-2	64741-55-5	Р
(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 $-20 \ ^{\circ}C$ to 190 $^{\circ}C$ (-4 $^{\circ}F$ to 374 $^{\circ}F$ ). It contains a relatively large proportion of unsaturated hydrocarbons.	]			
Hydrocarbons $C_{3-11}$ , 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	,649-291-00-1	270-686-6	68476-46-0	Ρ

approximately up to 204 °C (400 °F).]				
Naphtha (petroleum), catalytic cracked light distd.; 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 <sub>1</sub> through C <sub>5</sub> ]			68783-09-5	P
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	649-293-00-2	295-311-3	91995-50-5	P

distillate from steam- cracked naphtha. It consists predominantly of aromatic hydrocarbons]			
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	295-431-6	92045-50-6	P

(140 °F to 392 °F).]				
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 a sweetening 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 <sub>8-12</sub> , catalytic- cracking, chem. neutralized; Low boiling point cat- cracked naphtha; [A complex combination	649-296-00-9	295-794-0	92128-94-4	Р

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 130 °C to 210 °C (266 °F to 410 °F).]			
Hydrocarbons, $649-297-00-4$ $C_{8-12}$ , 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	309-974-4	101794-97-2	P

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).]				
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	649-299-00-5	265-065-1	64741-63-5	P

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.]				
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	649-300-00-9	265-070-9	64741-68-0	Р

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).]			
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 carbon numbers predominantly in the range of $C_3$ through $C_6$ and boiling in the range of approximately – 49 °C	270-660-4	68475-79-6	Ρ

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	Ρ
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 $C_{6-1}$ ]	649-303-00-5	270-794-3	68478-15-9	P
Naphtha (petroleum), light catalytic reformed, aromfree; Low boiling point cat- reformed naphtha; [A complex combination of hydrocarbons obtained from distillation	649-304-00-0	270-993-5	68513-03-1	Р

of products				
from a				
catalytic				
reforming				
process.				
It consists				
predominantly of	1			
hydrocarbons				
having				
carbon				
numbers				
predominantly	r.			
in the				
range of				
$C_5$ through				
$C_8$ and				
boiling in				
the range of				
approximately				
$35 ^{\circ}\text{C}$ to				
120 °C				
(95 °F to				
248 °F). It				
contains a				
relatively				
large				
proportion				
of branched				
chain				
hydrocarbons				
with the				
aromatic				
components				
removed.]				
Distillates	649-305-00-6	271-008-1	68513-63-3	Р
(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 <sub>2</sub> through C <sub>6</sub> .]				
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	Р
Naphtha (petroleum), full-range reformed; Low boiling point cat- reformed naphtha;	649-307-00-7	272-895-8	68919-37-9	Р

[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 $35 \ ^{\circ}C$ to $230 \ ^{\circ}C$ (95 $^{\circ}F$ to $446 \ ^{\circ}F$ ).]				
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	649-308-00-2	273-271-8	68955-35-1	Р

carbon numbers predominantly in the range of $C_4$ through $C_{12}$ and boiling in the range of approximately $30 \ ^{\circ}C$ to $220 \ ^{\circ}C$ $(90 \ ^{\circ}F$ to $430 \ ^{\circ}F)$ . It contains a relatively large proportion of aromatic and branched chain hydrocarbons. This stream may contain $10 \ vol. \ \%$ or more benzene.]			
Distillates (petroleum), catalytic reformed hydrotreated light, $C_{8-12}$ arom. fraction; Low boiling point cat- reformed naphtha; [A complex combination of alkylbenzeness obtained by the catalytic reforming of petroleum naphtha. It consists predominantly of alkylbenzenes	285-509-8	85116-58-1	P

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).]				
Aromatic hydrocarbons, C <sub>8</sub> , catalytic reforming- derived; Low boiling point cat- reformed naphtha	649-310-00-3	295-279-0	91995-18-5	Ρ
Aromatic hydrocarbons, C <sub>7-12</sub> , C <sub>8</sub> - 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		297-401-8	93571-75-6	P

range of $C_7$ through $C_{12}$ (primarily $C_8$ ) and can contain nonaromatic hydrocarbons, both boiling in the range of approximately 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 dehydrogenatio 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	297-458-9	93572-29-3	Ρ

45 °C to 185 °C (113 °F to 365 °F).]				
Hydrocarbons $C_{7-12}$ , $C_{>9}$ - aromrich, 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	X	297-465-7	93572-35-1	Р
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 <sub>9</sub> and higher aromatic hydrocarbons.				
	,649-314-00-5	297-466-2	93572-36-2	Р

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				
$C_5$ through				
$C_{11}$ and				
boiling in				
the range of				
approximately				
35°C to				
125 °C				
(94 °F to				
257 °F),				
benzene and				
toluene.]				
Naphtha	649-316-00-6	265-075-6	64741-74-8	Р
(petroleum),	049-510-00-0	205-075-0	04/41-/4-0	1
light thermal				
cracked;				
Low boiling				
point				
thermally				
cracked				
naphtha;				
[A complex combination				
of				
01				

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).]				
Naphtha (petroleum), heavy thermal cracked; Low boiling point thermally cracked naphtha; [A complex combination of hydrocarbons from distillation of the products from a thermal cracking process. It consists predominantly of	649-317-00-1	265-085-0	64741-83-9	P

unsaturated hydrocarbons having carbon numbers predominantly in the range of $C_6$ through $C_{12}$ and boiling in the range of approximately $65 \ ^{\circ}C$ to $220 \ ^{\circ}C$ $(148 \ ^{\circ}F$ to $428 \ ^{\circ}F).$ ]				
Distillates (petroleum), heavy arom.; Low boiling point thermally cracked naphtha; [The complex combination of hydrocarbons from the distillation of the products from the distillation of the products from the thermal cracking of ethane and propane. This higher boiling fraction consists predominantly of $C_{5-7}$ aromatic hydrocarbons with some unsaturated aliphatic hydrocarbons having carbon	649-318-00-7	267-563-4	67891-79-6	Ρ

number predominantly of C <sub>5</sub> . This stream may contain benzene.]				
Distillates (petroleum), light arom.; Low boiling point thermally cracked naphtha; [The complex combination of hydrocarbons from the distillation of the products from the distillation of the products from the thermal cracking of ethane and propane. This lower boiling fraction consists predominantly of C <sub>5-7</sub> aromatic hydrocarbons with some unsaturated aliphatic hydrocarbons having a carbon number predominantly of C <sub>5</sub> . This stream may contain benzene.]		267-565-5	67891-80-9	Ρ
Distillates (petroleum), naphtha- raffinate	649-320-00-8	270-344-6	68425-29-6	Р

pyrolyzate-	1	l		
derived,				
gasoline-				
blending;				
Low boiling				
point				
thermally				
cracked				
naphtha;				
[The				
complex combination				
of				
hydrocarbons				
obtained by				
the pyrolysis				
fractionation				
at 816 °C				
(1 500 °F)				
of naphtha				
and raffinate.				
It consists predominantly				
of				
hydrocarbons				
having				
a carbon				
number				
of $C_9$ and				
boiling at				
approximately	1			
204 °C				
(400 °F).]				
Aromatic	649-321-00-3	270-658-3	68475-70-7	Р
hydrocarbons				
C <sub>6-8</sub> ,				
naphtha-				
raffinate				
pyrolyzate- derived;				
Low boiling				
point				
thermally				
cracked				
naphtha;				
[A complex				
combination				
of				
hydrocarbons				
obtained				
obtained				
by the by the				

pyrolysis at 816 °C (1 500 °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.]			
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	271-631-9	68603-00-9	P

60 °C (91 °F to 140 °F).]				
Distillates (petroleum), thermal cracked naphtha and gas oil, C <sub>5</sub> - 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 <sub>5</sub> with some dimerized C <sub>5</sub> olefins and boiling in the range of approximately 33 °C to 184 °C (91 °F to 363 °F).]			68603-01-0	P
Distillates (petroleum), thermal cracked naphtha and gas oil, extractive; Low boiling point	649-324-00- X	271-634-5	68603-03-2	P

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 2-methyl-2- butene and boiling in the 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	649-325-00-5	273-266-0	68955-29-3	Р

cracking process. It consists predominantly of aromatic hydrocarbons, primarily benzene.]				
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).]		295-447-3	92045-65-3	P
Naphtha (petroleum),	649-327-00-6	265-150-3	64742-48-9	Р

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 $65 \ ^{\circ}C$ to $230 \ ^{\circ}C$				
(149 °F to 446 °F).]				
Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with	649-328-00-1	265-151-9	64742-49-0	P

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 minus 20 °C to 190 °C (-4 °F to 374 °F).]				
Naphtha (petroleum), hydrodesulfur light; Low boiling point hydrogen treated naphtha; [A complex combination of hydrocarbons obtained from a catalytic hydrodesulfur 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	ization	265-178-6	64742-73-0	Р

to 190 °C (– 4 °F to 374 °F).]				
Naphtha (petroleum), hydrodesulfur heavy; Low boiling point hydrogen treated naphtha; [A complex combination of hydrocarbons obtained from a catalytic hydrodesulfur process. It consists of hydrocarbons having carbon numbers predominantly in the range of C <sub>7</sub> through C <sub>12</sub> and boiling in the range of approximately 90 °C to 230 °C (194 °F to 446 °F).]	ization		64742-82-1	P
Distillates (petroleum), hydrotreated middle, intermediate boiling; Low boiling point hydrogen treated naphtha; [A complex combination of	649-331-00-8	270-092-7	68410-96-8	P

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).]				
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	649-332-00-3	270-093-2	68410-97-9	P

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).]			
Distillates (petroleum), hydrotreated heavy naphtha, deisohexanize 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 <sub>3</sub> through C <sub>6</sub> and boiling in the range of	270-094-8	68410-98-0	P

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).]		270-988-8	68512-78-7	P
Naphtha (petroleum), hydrodesulfur thermal cracked light;	649-335-00- X ized	285-511-9	85116-60-5	Р

Low boiling point hydrogen treated naphtha; [A complex combination of hydrocarbons obtained by fractionation of hydrodesulfur 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).]				
Naphtha (petroleum), hydrotreated light, cycloalkane- contg.; Low boiling point hydrogen treated naphtha; [A complex combination of hydrocarbons obtained from the distillation of	649-336-00-5	285-512-4	85116-61-6	Р

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).]				
Naphtha (petroleum), heavy steam- cracked, hydrogenated; Low boiling point hydrogen treated naphtha	649-337-00-0	295-432-1	92045-51-7	Ρ
Naphtha (petroleum), hydrodesulfur full-range; Low boiling point hydrogen treated naphtha; [A complex combination of hydrocarbons obtained from a catalytic hydrodesulfur process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of	ization	295-433-7	92045-52-8	Р

C <sub>4</sub> through C <sub>11</sub> and boiling in the range of 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 $35 \ ^{\circ}C$ to 190 $^{\circ}C$	295-438-4	92045-57-3	Р

(95 °F to 374 °F).]			
Hydrocarbons $C_{4-12}$ , naphtha- cracking, hydrotreated; Low boiling point hydrogen treated naphtha; [A complex combination of hydrocarbons obtained by distillation from the product of a naphtha steam cracking process and subsequent catalytic selective hydrocarbons hydrocarbons 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).] Solvent		92045-61-9	P
naphtha (petroleum), hydrotreated	019 511 00-2	2002 10 2	-

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 <sub>6</sub> through C <sub>7</sub> and	c			
boiling in the range of approximately 73 °C to 85 °C (163 °F to 185 °F).]				
Naphtha (petroleum), light steam- cracked, hydrogenated; Low boiling point hydrogen treated naphtha; [A complex combination of hydrocarbons	649-342-00-8	296-942-7	93165-55-0	P

produced from the separation and subsequent hydrogenation of the products of a steamcracking process to produce ethylene. It consists predominantly of saturated and unsaturated paraffins, cyclic paraffins and cyclic aromatic hydrocarbons having carbon numbers predominantly in the range of C<sub>4</sub> 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 sulfur and oxygenated compounds.]

C <sub>6-11</sub> , hydrotreated, dearomatized;	,649-343-00-3	297-852-0	93763-33-8	Р
Low boiling				
point				
hydrogen				
treated				
naphtha;				
[A complex				
combination of				
hydrocarbons				
obtained				
as solvents				
which				
have been				
subjected to				
hydrotreatmen	it.			
in order				
to convert aromatics to				
naphthenes				
by catalytic				
hydrogenation	1			
	-	207.952.6	02762 24 0	D
Hydrocarbons $C_{9-12}$ ,	,649-344-00-9	297-853-6	93763-34-9	Р
hydrotreated,				
dearomatized;				
Low boiling				
point				
hydrogen				
treated				
naphtha;				
[A complex				
combination				
of				
hydrocarbons obtained				
as solvents				
which				
have been				
have been subjected to				
subjected to hydrotreatmen	t			
subjected to hydrotreatmen in order	t			
subjected to hydrotreatmen in order to convert	t			
subjected to hydrotreatmen in order to convert aromatics to	t			
subjected to hydrotreatmen in order to convert aromatics to naphthenes	t			
subjected to hydrotreatmen in order to convert aromatics to				

Stoddard solvent;	649-345-00-4	232-489-3	8052-41-3	Р
Low boiling				
point				
naphtha -				
unspecified;				
[A colorless,				
refined				
petroleum				
distillate that				
is free from				
rancid or				
objectionable				
odors and				
that boils in				
a range of				
approximately				
148,8 °C to				
204,4 °C.				
(300 °F to 400 °F).]				
Natural gas	649-346-00-	265-047-3	64741-47-5	Р
condensates	Х			
(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 <sub>2</sub> to				
$C_{20}$ . It is				
a liquid at				
atmospheric				
aumospherie				

and pressure.]				
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 recycling plant by processes such as refrigeration or absorption. It consists mainly of saturated aliphatic hydrocarbons having carbon numbers in the range of C <sub>2</sub> through C <sub>8</sub> .]	649-347-00-5	265-048-9	64741-48-6	P
Naphtha (petroleum), light hydrocracked; Low boiling naphtha - unspecified; [A complex combination of hydrocarbons from distillation of the products from a hydrocracking process.		265-071-4	64741-69-1	P

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 $- 20 \ ^{\circ}C$ to 180 $^{\circ}C$ $(-4 \ ^{\circ}F$ to 356 $^{\circ}F$ ).]			
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 <sub>6</sub> through C <sub>12</sub> , and boiling in the range of approximately	265-079-8	64741-78-2	Ρ

65 °C to 230 °C (148 °F to 446 °F).]				
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 <sub>4</sub> through C <sub>12</sub> and boiling in the range of approximately -10 °C to 230 °C (14 °F to 446 °F).]		265-089-2	64741-87-3	P
Naphtha (petroleum), acid-treated; Low boiling point naphtha - unspecified; [A complex combination	649-351-00-7	265-115-2	64742-15-0	P

of hydrocarbons obtained as a raffinate from a sulfuric acid treating process. It consists of hydrocarbons having carbon numbers predominantly in the range of $C_7$ through $C_{12}$ and boiling in the range of approximately 90 °C to 230 °C (194 °F to 446 °F).]				
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	649-352-00-2	265-122-0	64742-22-9	P

C <sub>6</sub> through C <sub>12</sub> and boiling in the range of approximately 65 °C to 230 °C (149 °F to 446 °F).]				
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).]			64742-23-0	Р
Naphtha (petroleum), catalytic dewaxed; Low boiling point	649-354-00-3	265-170-2	64742-66-1	Р

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).] 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	649-355-00-9	265-187-5	64742-83-2	P

of unsaturated hydrocarbons having carbon numbers predominantly in the range of $C_4$ through $C_{11}$ and boiling in the range of approximately minus 20 °C to 190 °C (-4 °F to 374 °F). This stream is likely to contain 10 vol. % or more benzene.]			
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 carbon numbers predominantly in the range of C <sub>8</sub> through	265-199-0	64742-95-6	P

C <sub>10</sub> and boiling in the range of approximately 135 °C to 210 °C (275 °F to 410 °F).]				
Aromatic hydrocarbons, C <sub>6-10</sub> , acid- treated, neutralized; Low boiling point naphtha - unspecified	649-357-00- X	268-618-5	68131-49-7	P
Distillates (petroleum), C <sub>3-5</sub> , 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 <sub>3</sub> through C <sub>5</sub> , predominantly isopentane and 3- methyl-1- butene. It consists of saturated and unsaturated hydrocarbons having carbon numbers	649-358-00-5	270-725-7	68477-34-9	Р

in the range of C <sub>3</sub> through C <sub>5</sub> , predominantly 2-methyl-2- butene.]				
Distillates (petroleum), polymd. steam- cracked petroleum distillates, C <sub>5-12</sub> 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	649-359-00-0	270-735-1	68477-50-9	P
hydrocarbons having carbon numbers predominantly in the range of $C_5$ through $C_{12}$ .]				
Distillates (petroleum), steam- cracked, C <sub>5-12</sub> fraction; Low boiling point	649-360-00-6	270-736-7	68477-53-2	Р

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 <sub>5</sub> through C <sub>12</sub> .]				
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	Ρ
Extracts (petroleum), cold-acid, C <sub>4-6</sub> ; Low boiling point naphtha - unspecified; [A complex combination of organic compounds	649-362-00-7	270-741-4	68477-61-2	Р

produced by cold acid unit extraction of saturated and unsaturated aliphatic hydrocarbons usually ranging in carbon numbers from C <sub>3</sub> through C <sub>6</sub> , predominantly pentanes and amylenes. It consists predominantly of saturated and unsaturated hydrocarbons having carbon numbers in the range of C <sub>4</sub> through C <sub>6</sub> , predominantly				
C <sub>5</sub> .] 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	649-363-00-2	270-771-8	68477-89-4	Р

numbers predominantly in the range of $C_4$ through $C_6$ .]				
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 <sub>4</sub> through C <sub>6</sub> .]	649-364-00-8	270-791-7	68478-12-6	Ρ
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	649-365-00-3	270-795-9	68478-16-0	Р

numbers predominantly in the range of C <sub>4</sub> through C <sub>6</sub> .]				
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 <sub>4</sub> through C <sub>15</sub> and boiling in the range of approximately 43 °C to 250 °C (110 °F-500 °]			68513-02-0	P
Naphtha (petroleum), steam- cracked middle arom.; Low boiling point	049-307-00-4	271-138-9	68516-20-1	P

naphtha - unspecified; [A complex combination of hydrocarbons produced by the 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 $C_{12}$ 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	649-368-00- X	271-262-3	68527-21-9	P

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).]				
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	649-369-00-5	271-263-9	68527-22-0	Р

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).]				
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	649-370-00-0	271-264-4	68527-23-1	P

hydrocarbons having carbon numbers predominantly in the range of C <sub>7</sub> through C <sub>9</sub> and boiling in the range of approximately 110 °C to 165 °C (230 °F to 329 °F).]			
Naphtha (petroleum), light steam- cracked, debenzenized; Low boiling point naphtha - unspecified; [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 <sub>4</sub> through C <sub>12</sub> and boiling in the range of approximately 80 °C to	271-266-5	68527-26-4	Р

218 °C (176 °F to 424 °F).]				
Naphtha (petroleum), aromcontg.; Low boiling point naphtha - unspecified	649-372-00-1	271-635-0	68603-08-7	Р
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 $C_5$ .]			68606-10-0	Р
Naphtha (petroleum), light, sweetened; Low boiling point naphtha - unspecified; [A complex combination of hydrocarbons obtained by subjecting a petroleum	649-374-00-2	272-206-0	68783-66-4	P

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 $- 20 \ ^{\circ}C$ to 100 $^{\circ}C$ $(-4 \ ^{\circ}F$ to 212 \ ^{\circ}F).]				
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,	649-375-00-8	272-896-3	68919-39-1	J

transmission, and distribution pipelines in deeps, scrubbers, etc. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C <sub>2</sub> through C <sub>8</sub> .]				
Distillates (petroleum), naphtha unifiner stripper; Low boiling point naphtha - unspecified; [A complex combination of hydrocarbons produced by stripping the products from the naphtha unifiner. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C <sub>2</sub> through C <sub>6</sub> .]			68921-09-5	P
Naphtha (petroleum), catalytic	649-377-00-9	285-510-3	85116-59-2	Р

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).] Gasoline; Low boiling point naphtha - unspecified; [A complex combination of hydrocarbons consisting primarily of	649-378-00-4	289-220-8	86290-81-5	P

paraffins, cycloparaffins aromatic and olefinic hydrocarbons having carbon numbers predominantly greater than C <sub>3</sub> and boiling in the range of 30 °C to 260 °C (86 °F to 500 °F).]				
Aromatic hydrocarbons, C <sub>7-8</sub> , dealkylation products, distn. residues; Low boiling point naphtha - unspecified	649-379-00- X	292-698-0	90989-42-7	Р
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 hydrotreatmer of the aromatic charges.	, 649-380-00-5 nt	295-298-4	91995-38-9	P

It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C <sub>4</sub> through C <sub>6</sub> , predominantly pentanes and pentenes, and boiling in the range of approximately 25 °C to 40 °C (77 °F to 104 °F).]				
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- cracked naphtha. It consists predominantly of hydrocarbons having carbon numbers in the range of C <sub>4</sub> through C <sub>6</sub> ,	649-381-00-0	295-302-4	91995-41-4	Ρ

predominantly C <sub>5</sub> .]	L			
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).] Naphtha		295-331-2	91995-68-5	Р
(petroleum), hydrodesulfur light, dearomatized;	zed			

Low boiling point naphtha - unspecified;				
[A complex combination of				
hydrocarbons obtained by distillation of hydrodesulfur	ized			
and dearomatized light				
petroleum fractions. It consists predominantly				
of C <sub>7</sub> paraffins and cycloparaffins				
boiling in a range of approximately 90 °C to				
100 °C (194 °F to 212 °F).]				
Naphtha (petroleum), light, C <sub>5</sub> -rich,	649-384-00-7	295-442-6	92045-60-8	Р
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 minus 10 °C to 35 °C (14 °F to 95 °F).]			
Hydrocarbons $C_{8-11}$ , naphtha- cracking, toluene cut; Low boiling point naphtha - unspecified; [A complex combination of hydrocarbons obtained by distillation from prehydrogenat cracked naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of $C_8$ through $C_{11}$ and boiling in the range of approximately	295-444-7	92045-62-0	P

130 °C to 205 °C (266 °F to 401 °F).]				
401 °F).]		295-445-2	92045-63-1	P
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				
the range of approximately 30 °C to 205 °C	,			

Naphtha (petroleum), light heat- soaked, steam- cracked; Low boiling point naphtha - unspecified;	649-387-00-3	296-028-8	92201-97-3	Р
[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 a carbon number 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).]	,			
Distillates (petroleum), C <sub>6</sub> -rich; Low boiling point naphtha - unspecified; [A complex combination of	649-388-00-9	296-903-4	93165-19-6	Р

hydrocarbons obtained from the distillation of a petroleum feedstock. It consists predominantly of hydrocarbons having carbon numbers of C <sub>5</sub> through C <sub>7</sub> , rich in C <sub>6</sub> , and boiling in the range of approximately 60 °C to 70 °C (140 °F to 158 °F).] Gasoline, pyrolysis, hydrogenated; Low boiling point naphtha- unspecified; [A distillation fraction	649-389-00-4	302-639-3	94114-03-1	Р
fraction from the hydrogenation of pyrolysis gasoline boiling in the range of approximately 20 °C to 200 °C (68 °F to 392 °F).]				
Distillates (petroleum), steam- cracked, $C_{8-12}$ fraction,	649-390-00- X	305-750-5	95009-23-7	Р

polymd., distn. lights; Low boiling point naphtha - unspecified; [A complex combination of hydrocarbons obtained by distillation of the polymerized C <sub>8</sub> through C <sub>12</sub> fraction from steam- cracked petroleum distillates. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C <sub>8</sub> through C <sub>12</sub> .]				
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	649-391-00-5	308-261-5	97926-43-7	P

bleaching earth. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of $C_6$ through $C_{10}$ and boiling in the range of approximately 80 °C to 180 °C (175 °F to 356 °F).]				
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	649-392-00-0	308-713-1	98219-46-6	Р

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).]			
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 $35 \ ^{\circ}C$ to $80 \ ^{\circ}C$ (95 $^{\circ}F$ to 176 $^{\circ}F$ ).]	308-714-7	98219-47-7	P

Distillates	649-394-00-1	309-862-5	101316-56-7	Р
(petroleum),				
C <sub>7-9</sub> , C <sub>8</sub> -rich,				
hydrodesulfur	ized			
dearomatized;				
Low boiling				
point				
naphtha -				
unspecified;				
[A complex				
combination				
of				
hydrocarbons				
obtained				
by the				
distillation				
of petroleum				
light fraction,				
hydrodesulfur	zed			
and				
dearomatized.				
It consists				
predominantly	r			
of				
hydrocarbons				
having				
carbon				
numbers				
in the				
range of C <sub>7</sub>				
through C <sub>9</sub> ,				
predominantly	r			
$C_8$ paraffins				
and				
cycloparaffins				
boiling in	, ,			
the range of				
approximately				
120 °C				
to 130 °C				
(248 °F to				
266 °F).]				
Hydrocarbong	,649-395-00-7	309-870-9	101316-66-9	Р
	, 0 <del>-</del> 7-393 <b>-</b> 00-7	507-070-7	101510-00-9	1
C <sub>6-8</sub> ,				
hydrogenated				
sorption-				
dearomatized,				
toluene				
raffination;				
Low boiling				
point				
-	I	I.	1	I

naphtha - unspecified; [A complex combination of hydrocarbons obtained during the sorptions 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 <sub>6</sub> through C <sub>8</sub> and boiling in the range of approximately 80 °C to				
Naphtha (petroleum), hydrodesulfur full-range coker; Low boiling point naphtha - unspecified; [A complex combination of hydrocarbons obtained by	649-396-00-2 ised	309-879-8	101316-76-1	Р

fractionation from hydrodesulfur 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).]		200.077.5	101705 01 1	
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	649-397-00-8	309-976-5	101795-01-1	Р

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).]				
Hydrocarbons $C_{3-6}, C_{5}$ - rich, steam- cracked naphtha; Low boiling point naphtha - unspecified; [A complex combination of hydrocarbons obtained by distillation of steam- cracked naphtha. It consists predominantly of hydrocarbons having carbon numbers in the range of C <sub>3</sub> through C <sub>6</sub> , predominantly C <sub>5</sub> .]		310-012-0	102110-14-5	Р
Hydrocarbons C <sub>5</sub> -rich, dicyclopentad contg.; Low boiling point naphtha - unspecified;	,649-399-00-9 iene-	310-013-6	102110-15-6	P

[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 dicyclopentad and boiling in the range of approximately 30 °C to	iene			
170 °C (86 °F to 338 °F).]				
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	649-400-00-2	310-057-6	102110-55-4	P

products resulting in a residue starting with hydrocarbons having carbon numbers greater than C <sub>5</sub> . It consists predominantly of aromatic hydrocarbons having carbon numbers greater than C <sub>5</sub> and boiling above approximately $40 ^{\circ}C$ $(104 ^{\circ}F)$ .]				
Hydrocarbons $C_{\geq 5}, C_{5-6}$ - rich; Low boiling point naphtha - unspecified	,649-401-00-8	270-690-8	68476-50-6	Ρ
Hydrocarbons C <sub>5</sub> -rich; Low boiling point naphtha - unspecified	,649-402-00-3	270-695-5	68476-55-1	Р
Aromatic hydrocarbons, $C_{8-10}$ ; Low boiling point naphtha - unspecified	649-403-00-9	292-695-4	90989-39-2	Р

(c) The following entries 024-004-00-7; 649-089-00-3; 649-119-00-5; 649-151-00-X are replaced by:

Sodium	024-004-00-7	234-190-3	10588-01-9	
dichromate				

C <sub>1-4</sub> , 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 <sub>1</sub> through C <sub>4</sub> and boiling in the range of approximately $- 164 \ ^{\circ}C$ to $- 0,5 \ ^{\circ}C$ $(- 263 \ ^{\circ}F$ to $31 \ ^{\circ}F$ ).]			68514-36-3	K
Raffinates (petroleum), steam- cracked C <sub>4</sub> fraction cuprous ammonium acetate extn., C <sub>3-5</sub> and C <sub>3-5</sub> unsatd., butadiene- free; Petroleum gas	649-119-00-5	307-769-4	97722-19-5	K

Petroleum	649-151-00-	271-750-6	68607-11-4	K
products,	X			
refinery				
gases;				
Refinery gas;				
[A complex				
combination				
which				
consists				
primarily of				
hydrogen				
with various				
small				
amounts of				
methane,				
ethane, and				
propane.]				

In Appendix 5, the table is amended as follows: (6)

The following entries are inserted in accordance with the order of the entries set out in Appendix 5 of Annex XVII of Regulation (EC) No 1907/2006:

Slimes and sludges, copper electrolyte refining, decopperised	028-015-00-8	305-433-1	94551-87-8	
Silicic acid, lead nickel salt	028-050-00-9		68130-19-8	

- (7)In Appendix 6, the table is amended as follows:
  - The following entry is deleted: 024-004-01-4; (a)
  - (b) The following entries are inserted in accordance with the order of the entries set out in Appendix 6 of Annex XVII of Regulation (EC) No 1907/2006:

Dibutyltin hydrogen borate	005-006-00-7	401-040-5	75113-37-0	
Boric acid; [1]	005-007-00-2	233-139-2 [1]	10043-35-3 [1]	
Boric acid, crude natural, containing not more than 85 % of H <sub>3</sub> BO <sub>3</sub> calculated		234-343-4 [2]	11113-50-1 [2]	

on the dry weight; [2]				
Diboron trioxide; Boric oxide	005-008-00-8	215-125-8	1303-86-2	
Disodium tetraborate, anhydrous;	005-011-00-4			
Boric acid, disodium salt; [1]		215-540-4 [1]	1330-43-4 [1]	
Tetraboron disodium heptaoxide, hydrate; [2]		235-541-3 [2]	12267-73-1 [2]	
Orthoboric acid, sodium salt; [3]		237-560-2 [3]	13840-56-7 [3]	
Disodium tetraborate decahydrate; Borax decahydrate	005-011-01-1	215-540-4	1303-96-4	
Disodium tetraborate pentahydrate; Borax pentahydrate	005-011-02-9	215-540-4	12179-04-3	
Sodium perborate; [1]	005-017-00-7	239-172-9 [1]	15120-21-5 [1]	
Sodium peroxometabo [2]	rate;	231-556-4 [2]	7632-04-4 [2]	
Sodium peroxoborate; [containing < 0,1 % (w/w) of particles with an aerodynamic diameter of below 50 µm]				
Sodium perborate; [1]	005-017-01-4	239-172-9 [1]	15120-21-5 [1]	

Sodium peroxometabo [2] Sodium peroxoborate; [containing $\geq 0,1 \%$ (w/w) of particles with an aerodynamic diameter of below 50 µm]	rate;	231-556-4 [2]	7632-04-4 [2]	
Perboric acid (H <sub>3</sub> BO <sub>2</sub> (O <sub>2</sub> )), monosodium salt trihydrate; [1]	005-018-00-2	239-172-9 [1]	13517-20-9 [1]	
Perboric acid, sodium salt, tetrahydrate; [2]		234-390-0 [2]	37244-98-7 [2]	
Perboric acid (HBO(O <sub>2</sub> )), sodium salt, tetrahydrate; [3]		231-556-4 [3]	10486-00-7 [3]	
Sodium peroxoborate hexahydrate; [containing < 0,1 % (w/w) of particles with an aerodynamic diameter of below 50 µm]				
Perboric acid (H <sub>3</sub> BO <sub>2</sub> (O <sub>2</sub> )), monosodium salt, trihydrate; [1]	005-018-01- X	239-172-9 [1]	13517-20-9 [1]	
Perboric acid,		234-390-0 [2]	37244-98-7 [2]	

sodium salt, tetrahydrate; [2]			
Perboric acid (HBO(O <sub>2</sub> )), sodium salt, tetrahydrate; [3]		231-556-4 [3]	10486-00-7 [3]
Sodium peroxoborate hexahydrate; [containing $\geq 0,1 \%$ (w/w) of particles with an aerodynamic diameter of below 50 µm]			
Perboric acid, sodium salt; [1]	005-019-00-8	234-390-0 [1]	11138-47-9 [1]
Perboric acid, sodium salt, monohydrate; [2]		234-390-0 [2]	12040-72-1 [2]
Perboric acid (H <sub>3</sub> BO <sub>2</sub> (O <sub>2</sub> )), monosodium salt, monohydrate; [3]		231-556-4 [3]	10332-33-9 [3]
Sodium peroxoborate; [containing < 0,1 % (w/w) of particles with an aerodynamic diameter of below 50 µm]			
Perboric acid, sodium salt; [1]	005-019-01-5	234-390-0 [1]	11138-47-9 [1]

Perboric acid, sodium salt, monohydrate; [2]		234-390-0 [2]	12040-72-1 [2]	
Perboric acid (H <sub>3</sub> BO <sub>2</sub> (O <sub>2</sub> )), monosodium salt, monohydrate; [3]		231-556-4 [3]	10332-33-9 [3]	
Sodium peroxoborate; [containing $\geq 0,1 \%$ (w/w) of particles with an aerodynamic diameter of below 50 µm]				
(4- ethoxyphenyl) (3-(4- fluoro-3- phenoxypheny	014-036-00- X (1)propyl)dimet	405-020-7 hylsilane	105024-66-6	
Tris(2- chloroethyl)ph	015-102-00-0 osphate	204-118-5	115-96-8	
Glufosinate ammonium (ISO); Ammonium 2-amino-4- (hydroxymeth	015-155-00- X ylphosphinyl)b	278-636-5 utyrate	77182-82-2	
Cobalt dichloride	027-004-00-5	231-589-4	7646-79-9	
Cobalt sulfate	027-005-00-0	233-334-2	10124-43-3	
Cobalt acetate	027-006-00-6	200-755-8	71-48-7	
Cobalt nitrate	027-009-00-2	233-402-1	10141-05-6	
Cobalt carbonate	027-010-00-8	208-169-4	513-79-1	

	1	[		
Nickel dihydroxide; [1]	028-008-00- X	235-008-5 [1]	12054-48-7 [1]	
Nickel hydroxide; [2]		234-348-1 [2]	11113-74-9 [2]	
Nickel sulfate	028-009-00-5	232-104-9	7786-81-4	
Nickel carbonate;	028-010-00-0			
Basic nickel carbonate;				
Carbonic acid, nickel (2+) salt; [1]		222-068-2 [1]	3333-67-3 [1]	
Carbonic acid, nickel salt; [2]		240-408-8 [2]	16337-84-1 [2]	
[μ- [carbonato(2-) O:O ']]dihydroxy trinickel; [3]	- -	265-748-4 [3]	65405-96-1 [3]	
[carbonato(2-) [4]	]tetrahydroxytr	i <b>ðR5k7</b> 11,5-9 [4]	12607-70-4 [4]	
Nickel dichloride	028-011-00-6	231-743-0	7718-54-9	
Nickel dinitrate; [1]	028-012-00-1	236-068-5 [1]	13138-45-9 [1]	
Nitric acid, nickel salt; [2]	-	238-076-4 [2]	14216-75-2 [2]	
Slimes and sludges, copper electrolytic refining, decopperised, nickel sulfate	028-014-00-2	295-859-3	92129-57-2	
Nickel diperchlorate; Perchloric acid, nickel (II) salt	028-016-00-3	237-124-1	13637-71-3	

Nickel	028-017-00-9	237-563-9	13842-46-1	
dipotassium bis(sulfate); [1]		[1]	[1]	
Diammonium nickel bis(sulfate); [2]		239-793-2 [2]	15699-18-0 [2]	
Nickel bis(sulfamidat Nickel sulfamate	028-018-00-4 e);	237-396-1	13770-89-3	
Nickel bis(tetrafluoro	028-019-00- bXarate)	238-753-4	14708-14-6	
Nickel diformate; [1]	028-021-00-0	222-101-0 [1]	3349-06-2 [1]	
Formic acid, nickel salt; [2]		239-946-6 [2]	15843-02-4 [2]	
Formic acid, copper nickel salt; [3]		268-755-0 [3]	68134-59-8 [3]	
Nickel di(acetate); [1]	028-022-00-6	206-761-7 [1]	373-02-4 [1]	
Nickel acetate; [2]		239-086-1 [2]	14998-37-9 [2]	
Nickel dibenzoate	028-024-00-7	209-046-8	553-71-9	
Nickel bis(4- cyclohexylbut	028-025-00-2 yrate)	223-463-2	3906-55-6	
Nickel (II) stearate; Nickel (II) octadecanoate	028-026-00-8	218-744-1	2223-95-2	
Nickel dilactate	028-027-00-3		16039-61-5	
Nickel (II) octanoate	028-028-00-9	225-656-7	4995-91-9	
Nickel difluoride; [1]	028-029-00-4	233-071-3 [1]	10028-18-9 [1]	

Nickel dibromide; [2]		236-665-0 [2]	13462-88-9 [2]
Nickel diiodide; [3]		236-666-6 [3]	13462-90-3 [3]
Nickel potassium fluoride; [4]		- [4]	11132-10-8 [4]
Nickel hexafluorosilio	028-030-00- cate	247-430-7	26043-11-8
Nickel selenate	028-031-00-5	239-125-2	15060-62-5
Nickel dithiocyanate	028-046-00-7	237-205-1	13689-92-4
Nickel dichromate	028-047-00-2	239-646-5	15586-38-6
Nickel dichlorate; [1]	028-053-00-5	267-897-0 [1]	67952-43-6 [1]
Nickel dibromate; [2]		238-596-1 [2]	14550-87-9 [2]
Ethyl hydrogen sulfate, nickel (II) salt; [3]		275-897-7 [3]	71720-48-4 [3]
Nickel (II) trifluoroacetat [1]	028-054-00-0 e;	240-235-8 [1]	16083-14-0 [1]
Nickel (II) propionate; [2]		222-102-6 [2]	3349-08-4 [2]
Nickel bis(benzenesu [3]	lfonate);	254-642-3 [3]	39819-65-3 [3]
Nickel (II) hydrogen citrate; [4]		242-533-3 [4]	18721-51-2 [4]
Citric acid, ammonium nickel salt; [5]		242-161-1 [5]	18283-82-4 [5]

	<b>A</b> 4 <b>F</b> 4 4 0 0	
Citric acid, nickel salt; [6]	245-119-0 [6]	22605-92-1 [6]
Nickel bis(2- ethylhexanoate); [7]	224-699-9 [7]	4454-16-4 [7]
2- Ethylhexanoic acid, nickel salt; [8]	231-480-1 [8]	7580-31-6 [8]
Dimethylhexanoic acid nickel salt; [9]	301-323-2 [9]	93983-68-7 [9]
Nickel (II) isooctanoate; [10]	249-555-2 [10]	29317-63-3 [10]
Nickel isooctanoate; [11]	248-585-3 [11]	27637-46-3 [11]
Nickel bis(isononanoate); [12]	284-349-6 [12]	84852-37-9 [12]
Nickel (II) neononanoate; [13]	300-094-6 [13]	93920-10-6 [13]
Nickel (II) isodecanoate; [14]	287-468-1 [14]	85508-43-6 [14]
Nickel (II) neodecanoate; [15]	287-469-7 [15]	85508-44-7 [15]
Neodecanoic acid, nickel salt; [16]	257-447-1 [16]	51818-56-5 [16]
Nickel (II) neoundecanoate; [17]	300-093-0 [17]	93920-09-3 [17]
Bis(d- gluconato- O <sup>1</sup> ,O <sup>2</sup> )nickel; [18]	276-205-6 [18]	71957-07-8 [18]
Nickel 3,5- bis(tert- butyl)-4-	258-051-1 [19]	52625-25-9 [19]

hydroxybenzo (1:2); [19]	ate		
Nickel (II) palmitate; [20]		237-138-8 [20]	13654-40-5 [20]
(2- ethylhexanoate O) (isononanoato O)nickel; [21]		287-470-2 [21]	85508-45-8 [21]
(isononanoato O) (isooctanoato- O)nickel; [22]	-	287-471-8 [22]	85508-46-9 [22]
(isooctanoato- O) (neodecanoato O)nickel; [23]	-	284-347-5 [23]	84852-35-7 [23]
(2- ethylhexanoato O) (isodecanoato- O)nickel; [24]		284-351-7 [24]	84852-39-1 [24]
(2- ethylhexanoato O) (neodecanoato O)nickel; [25]		285-698-7 [25]	85135-77-9 [25]
(isodecanoato- O) (isooctanoato- O)nickel; [26]		285-909-2 [26]	85166-19-4 [26]
(isodecanoato- O) (isononanoato- O)nickel; [27]		284-348-0 [27]	84852-36-8 [27]
(isononanoato O) (neodecanoato O)nickel; [28]		287-592-6 [28]	85551-28-6 [28]

Fatty acids, C <sub>6-19</sub> - branched, nickel salts; [29]		294-302-1 [29]	91697-41-5 [29]	
Fatty acids, C <sub>8-18</sub> and C <sub>18</sub> - unsaturated, nickel salts; [30]		283-972-0 [30]	84776-45-4 [30]	
2,7- Naphthalened acid, nickel(II) salt; [31]	isulfonic	- [31]	72319-19-8 [31]	
Dibutyltin dichloride; (DBTC)	050-022-00- X	211-670-0	683-18-1	
Mercury	080-001-00-0	231-106-7	7439-97-6	
2-(2- aminoethylam (AEEA)	603-194-00-0 ino)ethanol	203-867-5	111-41-1	
1,2- Diethoxyethar	603-208-00-5 ne	211-076-1	629-14-1	
(E)-3- [1-[4-[2- (dimethylamin phenylbut-1- enyl]phenol	604-073-00-5 no)ethoxy]phen		82413-20-5	
N-methyl-2- pyrrolidone; 1-Methyl-2- pyrrolidone	606-021-00-7	212-828-1	872-50-4	
2-Butyryl-3- hydroxy-5- thiocyclohexa yl- cyclohex-2- en-1-one	606-100-00-6 n-3-	425-150-8	94723-86-1	
Cyclic 3-(1,2- ethanediylacet estra-5(10),9( diene-3,17- dione		427-230-8	5571-36-8	

1,2- Benzenedicarb acid; Di-C <sub>6-8</sub> - branched alkylesters, C7-rich	607-483-00-2 oxylic	276-158-1	71888-89-6	
Diisobutyl phthalate	607-623-00-2	201-553-2	84-69-5	
Perfluorooctar sulfonic acid;	1 <b>6</b> 07-624-00-8			
Heptadecafluc sulfonic acid; [1]	rooctane-1-	217-179-8 [1]	1763-23-1 [1]	
Potassium perfluorooctar	esulfonate;			
Potassium heptadecafluor sulfonate; [2]	rooctane-1-	220-527-1 [2]	2795-39-3 [2]	
Diethanolamir perfluorooctar sulfonate; [3]		274-460-8 [3]	70225-14-8 [3]	
Ammonium perfluorooctar sulfonate;	ne			
Ammonium heptadecafluor [4]	rooctanesulfona	249-415-0 a(et]	29081-56-9 [4]	
Lithium perfluorooctar sulfonate;	ie			
Lithium heptadecafluor [5]	rooctanesulfona	249-644-6 a(&]	29457-72-5 [5]	
Chloro-N,N- dimethylformi chloride	612-250-00-3 minium	425-970-6	3724-43-4	
7- Methoxy-6- (3- morpholin-4- yl- propoxy)-3H- quinazolin-4- one;	612-253-01-7	429-400-7	199327-61-2	

[containing $\geq 0,5 \%$ formamide (EC No 200-842-0	)]			
1-[4-[4- [[(2SR,4RS)-2 (2,4- dichloropheny (imidazol-1- ylmethyl)-1,3- dioxolan-4-	1)-2-		65277-42-1	
Potassium 1-methyl-3- morpholinocat [3-(1- methyl-3- morpholinocat oxo-2- pyrazolin-4- ylidene)-1- propenyl]pyra olate; [containing $\geq 0,5 \%$ N,N- dimethylformat (EC No 200-679-5	rbonyl-5- zole-5- amide	418-260-2	183196-57-8	
N-[6,9- dihydro-9- [[2- hydroxy-1- (hydroxymeth oxo-1H- purin-2- yl]acetamide	616-148-00- X yl)ethoxy]meth	424-550-1 yl]-6-	84245-12-5	
N,N- (dimethylamir hydrochloride	616-180-00-4 o)thioacetamic		27366-72-9	

(c) The following entries 024-004-00-7; 609-023-00-6 are replaced by:

Sodium dichromate	024-004-00-7	234-190-3	10588-01-9	
Dinocap (ISO);	609-023-00-6	254-408-0	39300-45-3	

(RS)-2,6- dinitro-4- octylphenyl crotonates and (RS)-2,4- dinitro-6- octylphenyl crotonates in which "octyl" is a reaction mass of 1- methylheptyl, 1-ethylhexyl and 1-		

(8)The following Appendix 11 is inserted:

> 'Appendi Entries 28 to 30 - Derogations for specific substancesOJ L 104, 8.4.2004, 11

- p. 1.'SubstancesDerogations1.
  - Sodium perborate; perboric acid, sodium salt; perboric acid, (a) sodium salt, monohydrate; sodium peroxometaborate; perboric acid (HBO $(O_2)$ ), sodium salt, monohydrate; sodium peroxoborate CAS No 15120-21-5; 11138-47-9; 12040-72-1; 7632-04-4; 10332-33-9 EC No 239-172-9; 234-390-0; 231-556-4
  - (b) Perboric acid (H<sub>3</sub>BO<sub>2</sub>(O<sub>2</sub>)), monosodium salt trihydrate; perboric acid, sodium salt, tetrahydrate; perboric acid (HBO(O<sub>2</sub>)), sodium salt, tetrahydrate; sodium peroxoborate hexahydrate CAS No 13517-20-9; 37244-98-7; 10486-00-7 EC No 239-172-9; 234-390-0; 231-556-4

Detergents as defined by Regulation (EC) No 648/2004 of the European Parliament and of the Council. The derogation shall apply until 1 June 2013.

- (**1**) OJ L 396, 30.12.2006, p. 1.
- (2) OJ L 353, 31.12.2008, p. 1.
- (**3**) OJ L 235, 5.9.2009, p. 1.
- (4) http://ec.europa.eu/enterprise/sectors/chemicals/files/docs\_studies/final\_report\_borates\_en.pdf
- (5) http://echa.europa.eu/home\_en.asp
- (6) OJ L 84, 5.4.1993, p. 1.

# Status:

Point in time view as at 09/02/2012.

### Changes to legislation:

There are currently no known outstanding effects for the Commission Regulation (EU) No 109/2012.