[X1ANNEX XVII

RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, [F1MIXTURES] AND ARTICLES

Editorial Information

X1 Substituted by Corrigendum 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 (Official Journal of the European Union L 396 of 30 December 2006).

Textual Amendments

F1 Substituted by 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 (Text with EEA relevance).

Appendix 2

[[F1]Point 28 — Carcinogens: category 1B (Table 3.1)/ category 2 (Table 3.2)**]**

ANNEX XVII Table 3: rows 651 - 700

Naphtha (petroleum), catalytic reformed light, aromatic-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.)	649-377-00-9	285-510-3	85116-59-2	P
Gasoline; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons consisting primarily of paraffins,	649-378-00-4	289-220-8	86290-81-5	P

cycloparaffins, aromatic and olefinic hydrocarbons having carbon numbers predominantly greater than C_3 and boiling in the range of 30 °C to 260 °C.)				
Aromatic hydrocarbons, C_{7-8}, dealkylation products, distillation residues; Low boiling point naphtha — unspecified	649-379-00-X	292-698-0	90989-42-7	P
Hydrocarbons, C_{4-6}, depentaniser lights, arom. hydrotreater; Low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained as first runnings from the depentaniser column before hydrotreatment of the aromatic charges. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_4 through C_6, predominantly pentanes and pentenes, and boiling in	649-380-00-5	295-298-4	91995-38-9	P

the range of approximately 25 °C to 40 °C.)				
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_4 through C_6, predominantly C_5.)	649-381-00-0	295-302-4	91995-41-4	P
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	649-382-00-6	295-331-2	91995-68-5	P

numbers predominantly in the range of C_7 through C_8 and boiling in the range of approximately 100 °C to 200 °C.)				
Naphtha (petroleum), hydrodesulphurised light, dearomatised; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by distillation of hydrodesulphurised and dearomatised light petroleum fractions. It consists predominantly of C_7 paraffins and cycloparaffins boiling in a range of approximately 90 °C to 100 °C.)	649-383-00-1	295-434-2	92045-53-9	P
Naphtha (petroleum), light, C_5-rich, sweetened; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by subjecting a petroleum naphtha to a sweetening	649-384-00-7	295-442-6	92045-60-8	P

process to convert mercaptans or to remove acidic impurities. It consists of hydrocarbons having carbon numbers predominantly in the range of C_4 through C_5, predominantly C_5, and boiling in the range of approximately -10 °C to 35 °C.)				
Hydrocarbons, C_{8-11}, naphtha-cracking, toluene cut; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by distillation from prehydrogenated cracked naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_8 through C_{11} and boiling in the range of approximately 130 °C to 205 °C.)	649-385-00-2	295-444-7	92045-62-0	P
Hydrocarbons, C_{4-11}, naphtha-cracking; aromatic-free; low boiling point naphtha — unspecified	649-386-00-8	295-445-2	92045-63-1	P

(A complex combination of hydrocarbons obtained from prehydrogenated cracked naphtha after distillative separation of benzene- and toluene-containing hydrocarbon cuts and a higher boiling fraction. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_4 through C_{11} and boiling in the range of approximately 30 °C to 205 °C.)				
Naphtha (petroleum), light heat-soaked, steam-cracked; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by the fractionation of steam cracked naphtha after recovery from a heat soaking process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of	649-387-00-3	296-028-8	92201-97-3	P

C_4 through C_6 and boiling in the range of approximately 0 °C to 80 °C.)				
Distillates (petroleum), C_6-rich; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained from the distillation of a petroleum feedstock. It consists predominantly of hydrocarbons having carbon numbers of C_5 through C_7, rich in C_6, and boiling in the range of approximately 60 °C to 70 °C.)	649-388-00-9	296-903-4	93165-19-6	P
Gasoline, pyrolysis, hydrogenated; low boiling point naphtha — unspecified (A distillation fraction from the hydrogenation of pyrolysis gasoline boiling in the range of approximately 20 °C to 200 °C.)	649-389-00-4	302-639-3	94114-03-1	P
Distillates (petroleum), steam-cracked, C_{8-12} fraction, polymd., distillation lights; low boiling point	649-390-00-X	305-750-5	95009-23-7	P

naphtha — unspecified (A complex combination of hydrocarbons obtained by distillation of the polymerised C_8 through C_{12} fraction from steam-cracked petroleum distillates. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C_8 through C_{12}.)				
Extracts (petroleum); heavy naphtha solvent, clay-treated; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by the treatment of heavy naphthic solvent petroleum extract with bleaching earth. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_6 through C_{10}, and boiling in the range of approximately	649-391-00-5	308-261-5	97926-43-7	P

80 °C to 180 °C.)				
Naphtha (petroleum), light steam-cracked, debenzenised, thermally treated; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by the treatment and distillation of debenzenised light steam-cracked petroleum naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_7 through C_{12} and boiling in the range of approximately 95 °C to 200 °C.)	649-392-00-0	308-713-1	98219-46-6	P
Naphtha (petroleum), light steam-cracked, thermally treated; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by the treatment and distillation of light steam-	649-393-00-6	308-714-7	98219-47-7	P

cracked petroleum naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_5 through C_6 and boiling in the range of approximately 35 °C to 80 °C.)				
Distillates (petroleum), C_{7-9}, C_8-rich, hydrodesulphurised dearomatised; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by the distillation of petroleum light fraction, hydrodesulphurised and dearomatised. It consists predominantly of hydrocarbons having carbon numbers in the range of C_7 through C_9, predominantly C_8 paraffins and cycloparaffins, boiling in the range of approximately 120 °C to 130 °C.)	649-394-00-1	309-862-5	101316-56-7	P
Hydrocarbons, C_{6-8}, hydrogenated	649-395-00-7	309-870-9	101316-66-9	P

sorption-dearomatised, toluene raffination; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained during the sorption of toluene from a hydrocarbon fraction from cracked gasoline treated with hydrogen in the presence of a catalyst. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_6 through C_8 and boiling in the range of approximately 80 °C to 135 °C.)				
Naphtha (petroleum), hydrodesulphurised full-range coker; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by fractionation from hydrodesulphurised coker distillate. It consists predominantly of hydrocarbons having carbon	649-396-00-2	309-879-8	101316-76-1	P

numbers predominantly in the range of C_5 to C_{11} and boiling in the range of approximately 23 °C to 196 °C.)				
Naphtha (petroleum), sweetened light; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by subjecting a petroleum naphtha to a sweetening process to convert mercaptans or to remove acidic impurities. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_5 through C_8 and boiling in the range of approximately 20 °C to 130 °C.)	649-397-00-8	309-976-5	101795-01-1	P
Hydrocarbons, C_{3-6}, C_5-rich, steam-cracked naphtha; low boiling point naphtha — unspecified (A complex combination of hydrocarbons	649-398-00-3	310-012-0	102110-14-5	P

obtained by distillation of steam-cracked naphtha. It consists predominantly of hydrocarbons having carbon numbers in the range of C_3 through C_6, predominantly C_5.)				
Hydrocarbons, C_5-rich, dicyclopentadiene-containing; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by distillation of the products from a steam-cracking process. It consists predominantly of hydrocarbons having carbon numbers of C_5 and dicyclopentadiene and boiling in the range of approximately 30 °C to 170 °C.)	649-399-00-9	310-013-6	102110-15-6	P
Residues (petroleum), steam-cracked light, aromatic; low boiling point naphtha — unspecified (A complex combination of hydrocarbons obtained by the	649-400-00-2	310-057-6	102110-55-4	P

distillation of the products of steam cracking or similar processes after taking off the very light products resulting in a residue starting with hydrocarbons having carbon numbers greater than C_5. It consists predominantly of aromatic hydrocarbons having carbon numbers greater than C_5 and boiling above approximately 40 °C.)				
Hydrocarbons, $C_{\geq 5}$, C_{5-6}-rich; low boiling point naphtha — unspecified	649-401-00-8	270-690-8	68476-50-6	P
Hydrocarbons, C_5-rich; low boiling point naphtha — unspecified	649-402-00-3	270-695-5	68476-55-1	P
Aromatic hydrocarbons, C_{8-10}; Light oil redistillate, high boiling	649-403-00-9	292-695-4	90989-39-2	P
Distillates (petroleum), light catalytic cracked; Cracked gas oil (A complex combination of hydrocarbons produced by the distillation	649-435-00-3	265-060-4	64741-59-9	

of products from a catalytic cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_9 through C_{25} and boiling in the range of approximately 150 °C to 400 °C. It contains a relatively large proportion of bicyclic aromatic hydrocarbons.)				
Distillates (petroleum), intermediate catalytic cracked; Cracked gas oil (A complex combination of hydrocarbons produced by the distillation of products from a catalytic cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{11} through C_{30} and boiling in the range of approximately 205 °C to 450 °C. It contains a relatively large proportion of tricyclic aromatic hydrocarbons.)	649-436-00-9	265-062-5	64741-60-2	
Distillates (petroleum),	649-438-00-X	265-084-5	64741-82-8	

light thermal cracked; Cracked gas oil (A complex combination of hydrocarbons from the distillation of the products from a thermal cracking process. It consists predominantly of unsaturated hydrocarbons having carbon numbers predominantly in the range of C_{10} through C_{22} and boiling in the range of approximately 160 °C to 370 °C.)				
Distillates (petroleum), hydrodesulphurised light catalytic cracked; Cracked gas oil (A complex combination of hydrocarbons obtained by treating light catalytic cracked distillates with hydrogen to convert organic sulphur to hydrogen sulphide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of C_9 through C_{25} and boiling in	649-439-00-5	269-781-5	68333-25-5	

the range of approximately 150 °C to 400 °C. It contains a relatively large proportion of bicyclic aromatic hydrocarbons.)				
Distillates (petroleum), light steam-cracked naphtha; Cracked gas oil (A complex combination of hydrocarbons from the multiple distillation of products from a steam cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{10} through C_{18}.)	649-440-00-0	270-662-5	68475-80-9	
Distillates (petroleum), cracked steam-cracked petroleum distillates; Cracked gas oil (A complex combination of hydrocarbons produced by distilling cracked steam cracked distillate and/or its fractionation products. It consists of hydrocarbons having carbon numbers predominantly in the range	649-441-00-6	270-727-8	68477-38-3	

of C_{10} to low molecular weight polymers.)				
Gas oils (petroleum), steam-cracked; Cracked gas oil (A complex combination of hydrocarbons produced by distillation of the products from a steam cracking process. It consists of hydrocarbons having carbon numbers predominantly greater than C_9 and boiling in the range of from approximately 205 °C to 400 °C.)	649-442-00-1	271-260-2	68527-18-4	
Distillates (petroleum), hydrodesulphurised thermal cracked middle; Cracked gas oil (A complex combination of hydrocarbons obtained by fractionation from hydrodesulphurised thermal cracker distillate stocks. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{11} to C_{25} and boiling in the range of from	649-443-00-7	285-505-6	85116-53-6	

approximately 205 °C to 400 °C.)				
Gas oils (petroleum), thermal-cracked, hydrodesulphurised; Cracked gas oil	649-444-00-2	295-411-7	92045-29-9	
Residues (petroleum), hydrogenated steam-cracked naphtha; Cracked gas oil (A complex combination of hydrocarbons obtained as a residual fraction from the distillation of hydrotreated steam-cracked naphtha. It consists predominantly of hydrocarbons boiling in the range of approximately 200 °C to 350 °C.)	649-445-00-8	295-514-7	92062-00-5	
Residues (petroleum), steam-cracked naphtha distillation; Cracked gas oil (A complex combination of hydrocarbons obtained as a column bottom from the separation of effluents from steam cracking naphtha at a high temperature. It boils in the range of approximately	649-446-00-3	295-517-3	92062-04-9	

147 °C to 300 °C and produces a finished oil having a viscosity of 18 10^{-6} $m^2.s^{-1}$ at 50 °C.)				
Distillates (petroleum), light catalytic cracked, thermally degraded; Cracked gas oil (A complex combination of hydrocarbons produced by the distillation of products from a catalytic cracking process which has been used as a heat transfer fluid. It consists predominantly of hydrocarbons boiling in the range of approximately 190 °C to 340 °C. This steam is likely to contain organic sulphur compounds.)	649-447-00-9	295-991-1	92201-60-0	
Residues (petroleum), steam-cracked, heat-soaked naphtha; Cracked gas oil (A complex combination of hydrocarbons obtained as residue from the distillation of steam-cracked heat-soaked naphtha and boiling in	649-448-00-4	297-905-8	93763-85-0	

the range of approximately 150 °C to 350 °C.)				
Gas oils (petroleum), light vacuum, thermal-cracked hydrodesulphurised; Cracked gas oil (A complex combination of hydrocarbons obtained by catalytic dehydrosulphurisation of thermal-cracked light vacuum petroleum. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_{14} through C_{20} and boiling in the range of approximately 270 °C to 370 °C.)	649-450-00-5	308-278-8	97926-59-5	
Distillates (petroleum), hydrodesulphurised middle coker; Cracked gas oil (A complex combination of hydrocarbons by fractionation from hydrodesulphurised coker distillate stocks. It consists of hydrocarbons having carbon numbers predominantly in the range of	649-451-00-0	309-865-1	101316-59-0	

C_{12} through C_{21} and boiling in the range of approximately 200 °C to 360 °C.)				
Distillates (petroleum), heavy steam-cracked; Cracked gas oil (A complex combination of hydrocarbons obtained by distillation of steam cracking heavy residues. It consists predominantly of highly alkylated heavy aromatic hydrocarbons boiling in the range of approximately 250 °C to 400 °C.)	649-452-00-6	309-939-3	101631-14-5	
Distillates (petroleum), heavy hydrocracked; Base oil — unspecified (A complex combination of hydrocarbons from the distillation of the products from a hydrocracking process. It consists predominantly of saturated hydrocarbons having carbon numbers in the range of C_{15} through C_{39} and boiling in	649-453-00-1	265-077-7	64741-76-0	L

the range of approximately 260 °C to 600 °C.)				
Distillates (petroleum), solvent-refined heavy paraffinic; Base oil — unspecified (A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50} and produces a finished oil with a viscosity of at least 19 10^{-6} $m^2.s^{-1}$ at 40 °C.)	649-454-00-7	265-090-8	64741-88-4	L
Distillates (petroleum), solvent-refined light paraffinic; Base oil — unspecified (A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominantly of saturated hydrocarbons having carbon	649-455-00-2	265-091-3	64741-89-5	L

numbers predominantly in the range of C_{15} through C_{30} and produces a finished oil having a viscosity of less than 19 10^{-6} $m^2.s^{-1}$ at 40 °C.)				
Residual oils (petroleum), solvent deasphalted; Base oil — unspecified (A complex combination of hydrocarbons obtained as the solvent soluble fraction from C_3-C_4 solvent deasphalting of a residuum. It consists of hydrocarbons having carbon numbers predominantly higher than C_{25} and boiling above approximately 400 °C.)	649-456-00-8	265-096-0	64741-95-3	L
Distillates (petroleum), solvent-refined heavy naphthenic; Base oil — unspecified (A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists of	649-457-00-3	265-097-6	64741-96-4	L

hydrocarbons having carbon numbers predominantly in the range of C_{20} through C_{50} and produces a finished oil with a viscosity of at least 19 10^{-6} $m^2.s^{-1}$ at 40 °C. It contains relatively few normal paraffins.)				
Distillates (petroleum), solvent-refined light naphthenic; Base oil — unspecified (A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_{15} through C_{30} and produces a finished oil with a viscosity of less than 19 10^{-6} $m^2.s^{-1}$ at 40 °C. It contains relatively few normal paraffins.)	649-458-00-9	265-098-1	64741-97-5	L
Residual oils (petroleum), solvent-refined; Base oil — unspecified	649-459-00-4	265-101-6	64742-01-4	L

(A complex combination of hydrocarbons obtained as the solvent insoluble fraction from solvent refining of a residuum using a polar organic solvent such as phenol or furfural. It consists of hydrocarbons having carbon numbers predominantly greater than C_{25} and boiling above approximately 400 °C.)				

Status:
Point in time view as at 20/01/2009.

Changes to legislation:
There are currently no known outstanding effects for the Regulation (EC) No 1907/2006 of the European Parliament and of the Council, ANNEX XVII Table 3: rows 651 - 700.