

REPORT OF THE FORTY-THIRD SESSION

1 INTRODUCTION

1.1 The forty-third session of the GESAMP Working Group on the Evaluation of the Hazards of Harmful Substances Carried by Ships was held at IMO Headquarters, London, from 6 to 8 June 2006 under the chairmanship of Dr. C.T. Bowmer. The list of members attending this session is shown in annex 1 and the approved agenda is shown in annex 2.

2 MATTERS ARISING FROM IMO AND OTHER ORGANIZATIONS RELEVANT TO THE ACTIVITIES OF THE WORKING GROUP

2.1 It was noted that the fifty-fourth session of the Marine Environment Protection Committee (MEPC) was held from 20 to 24 March 2006.

2.2 The Group noted that MEPC 54 was informed that, due to time constraints, further work was required by the GESAMP/EHS Working Group which had a bearing on the classification of products under the revised IBC Code (expected to enter into force on 1 January 2007). It, therefore, was felt necessary to have another meeting tentatively scheduled for June 2006.

2.3 The Group also noted that the IMO Secretariat informed MEPC 53 that IMO had funded the regular annual meeting of the GESAMP/EHS Working Group held in February 2006 but that there was no budgetary allocation for another meeting this year.

2.4 The Group further noted that MEPC 54 had suggested that, subject to adherence to the financial rules of the Organization, the meeting should be funded by the budgetary allocation for next year's GESAMP/EHS regular meeting and to inform the Council of the current difficulty in financing GESAMP/EHS meetings. MEPC 54 also agreed that a long-term funding solution needed to be found which should involve those cargo interests, namely manufacturers of the products, which benefit directly from the work of the Group. In this regard, the Group was informed that the IMO Secretariat will prepare a document for MEPC 55 to keep this aspect of the EHS funding on the Committee's agenda.

2.5 It was noted that the ESPH Working Group met during the tenth session of the Bulk Liquids and Gases Sub-Committee (BLG), which was held from 3 to 7 April 2006, and considered urgent matters emanating from EHS 42. In this regard, the Group was informed that the notations of "Inorg" in columns A1 and A2 for "Fluorosilicic acid (20-30%) in water solution" were discussed. As a consequence of information provided by the Chairman of GESAMP/EHS Working Group, the columns were adjusted to "0" and "Inorg" respectively.

2.6 However, the ESPH Working Group agreed to invite the GESAMP/EHS Working Group to look further into the matter of the notation of "Inorg" in column A2 during the intersessional meeting in June 2006, with the observation that, in addition to the ratings "R" or "NR" which need to be generated, the information on "Inorg" is still necessary for products with an "S" in column E2.

Translation of the notation “Inorg” in column A2 for regulatory purposes under MARPOL Annex II and the IBC Code

2.7 The Group recalled that the GESAMP Reports & Studies 64 describes three ratings for Ready (bio)degradability as follows:

R = Readily (bio)degradable in the appropriate standard tests;
 NR = Not readily (bio)degradable in the appropriate standard tests; and
 Inorg = Inorganic, and not subject to biological degradation.

2.8 The Group noted that the IMO has chosen to use only the ratings “R” and “NR” for categorization purposes under the revised MARPOL Annex II and the amended IBC Code. In this regard, the Group was asked to provide an interpretation for all IBC Code substances listed as “Inorg” as to whether they are degradable or not. For this purpose, the term “readily degradable” is taken in the context of inorganic substances to mean rapidly dissociating or dissolving, so that the constituent ions separate in seawater and disperse.

2.9 The Group has employed the column E2 rating of “D” (dissolver: following the behaviour of chemicals in the marine environment and physical effects on wildlife and on benthic habitats described in section 4.5.2 of the GESAMP Reports & Studies 64). Any set of E2 ratings containing a “D” component (e.g. ED, FED, FD, D, DE and SD) according to the definition in the GESAMP Reports & Studies 64, would be considered as readily degradable and has been rated with an “R”. The rating of “R” is restricted to the water-soluble salts of the following cations:

Aluminium, ammonium, calcium, hydrogen, iron, magnesium, potassium, sodium, titanium and zinc;

and the water-soluble salts of the following anions:

Aluminosilicate, borate, bromate, bromide, borohydride, carbonate, chloride, fluorosilicate, hydroxide, hypochlorite, nitrate, nitrite, perborate, phosphate, phosphonate, silicate, sulphate, sulphide, sulphite, sulphonate, thiocyanate and thiosulphate.

2.10 Insoluble salts, those containing cations and anions other than the above and mineral slurries such as clay, coal, kaolin, silica and aluminosilicate, have been rated as “NR” for regulatory purposes. Any other new inorganic substances will be evaluated on a case-by-case basis.

2.11 The Group underlined that this approach should not be applied to organic compounds when no data are available (designated as “NI”) for column A2.

2.12 The Group agreed that for ease of use by the regulators, the rating scheme for ready biodegradability should be adjusted to:

RATING	DESCRIPTION
R	Readily biodegradable
NR	Not readily biodegradable
Inorg, R Inorg, NR	Inorganic substance

2.13 The results of this approach applied to entries which appear in the GESAMP/EHS Composite List of Hazard Profiles are set out at annex 3.

3 EVALUATION OF THE FOLLOWING GROUPS OF EXISTING PRODUCTS

Vegetable oils/derivatives

3.1 The Group recalled that at EHS 42 a number of vegetable oils and, in particular, their derivatives had been submitted for evaluation. In view of the numerous submissions and the fact that some of these products could be covered by existing entries, the Group felt that consolidation of fatty acids, nitriles, alcohols and methyl esters into representative groupings would facilitate the evaluation of these products in the future. The Group also recalled that it had carried out an inventory of the many vegetable oils and derivatives submitted and had agreed to consolidate them into groupings at its next meeting and carry out an evaluation of these products as appropriate. In considering these products and their evaluation, the Group made the following observations.

Vegetable oils

3.2 The Group agreed to retain the individual entries for vegetable oils in the GESAMP/EHS Composite List of Hazard Profiles.

Shea Butter

3.3 The Group assigned an “NR” in column A2 based on information received that the percentage biogradation after 28 days was 43% and 45% for crude Shea butter which did not meet the threshold percentage required for “Ready biodegradation”.

Palm Mid-Fraction (PMF)

3.4 Based on a submission from industry, the Group agreed to the proposal to have a separate entry for PMF in the GESAMP Composite List of Hazard Profiles. PMF is a speciality fat with physical properties which are related to those of Palm stearin or Palm olein, whilst its melting point (25-40°C) overlaps with that of Palm oil (33-30°C).

Palm Oil (High FFA)

3.5 Based on a submission from industry, the Group agreed to its proposal to have a separate and new entry for this product since the current entry in the Composite List for Palm oil covers Palm oil containing less than 15% free fatty acids. Based on the information submitted and noting that for the sake of consistency with other nomenclature for vegetable oils, the Group agreed that the entry should be qualified by a fatty acid content, and amended the name to read “Palm oil (containing more than 15% and less than 30% free fatty acids)”.

Interesterified mixed vegetable oil

3.6 The Group recalled that the product “Interesterified mixed vegetable oil” had been submitted at EHS 42 for evaluation but, pending the results of the outcome of the consolidation exercise, it had refrained from completing its profile.

3.7 The Group was informed that the process of interesterification involves the re-distribution of the fatty acid moieties in the triglyceride (triacylglycerol) of a vegetable oil or its re-arrangement. The interesterification process does not alter the structure of the fatty acid compositions of an oil or fat and the substance inherits the chemical properties of the parent oil(s) from which it is derived.

3.8 The Group agreed that in view of the fact that blends of interesterified oils could be offered for carriage, a separate entry to cover such blends is warranted and developed a hazard profile in this regard. Since the blends are derived from more than one parent oil, the Group agreed to amend the name submitted to “Intesterified mixed vegetable oils”.

3.9 The Group recommended that in the future any interesterified blends derived from vegetable oil(s) could be considered as a synonym of this entry as appropriate.

Fatty acid methyl esters (FAME)

3.10 The Group recalled that at EHS 41, industry had requested the Group to evaluate fatty acid methyl ester (FAME) with a view to having a generic entry for the product in order to have all other potential FAME products dealt with under this entry, regardless of origin.

3.11 The Group noted that any consolidation would need to retain the following three products as these are existing entries in the IBC Code:

- .1 Coconut fatty acid methyl ester;
- .2 Palm oil fatty acid methyl ester; and
- .3 Rapeseed oil fatty methyl esters.

3.12 The Group recalled that at EHS 42, it had begun to develop a profile for FAME containing C6 to C18 methyl esters. However, it became apparent that the short-chained methyl esters were more harmful than the longer-chained ones, e.g. as in the case of eye irritation. It was, therefore, decided to develop the following two profiles:

- .1 Fatty acid methyl esters; and
- .2 Fatty acid methyl esters (C14+), to cover the less corrosive/irritating long chain products.

3.13 Based on substantial information from the APAG Sector Group of CEFIC, the Group agreed that the whole range of C6 to C18 products have irritation properties and that the entry defined by the carbon chain length C14+ was a subset of the original submission. The Group therefore agreed to delete the entry “Fatty acid methyl esters (C14+)” and assigned the following single hazard profile to FAME:

	A1A	A1B	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Fatty acid methyl esters (EHS No.2362)	0	NI	0	R	2	NI	0	(0)	(2)	2	2		NI	Fp	2
Fatty acid methyl ester C14+ (EHS No.2354)	DELETED														

3.14 The Group recommended that in the future any methyl ester derived from vegetable oil(s) which is not a current entry in the IBC Code could be considered as a synonym of FAME.

3.15 The Group also agreed that with regard to the two submissions: 1) Palm oil methyl ester C16-C18; and 2) Palm kernel oil methyl esters C12-C18; the former was already covered by the existing entry in the IBC Code – Palm oil fatty acid methyl ester, whilst the latter could be considered as a synonym of FAME.

Fatty acids

3.16 Within this group of products, the Group noted the following substances had been submitted for evaluation, some of which already had completed profiles:

- .1 Coconut oil fatty acid^{1, 2};
- .2 Fatty acids, linear, C12+ saturated with C12+ unsaturated²;
- .3 Fatty acids, linear, C8-C18, saturated with C18 unsaturated²;
- .4 Fatty acids, saturated, linear, C12+²;
- .5 Fatty acids, unsaturated, linear, C16+²;
- .6 Fatty acid (saturated, C13+)^{1, 2};
- .7 Palm kernel oil fatty acid;
- .8 Tallow fatty acid^{1, 2};
- .9 Palm fatty acids C16+;
- .10 Palm kernel fatty acids, saturated, C8+; and
- .11 Fatty acids saturated C8-C10.

3.17 In reviewing the various entries, the Group noted that:

- .1 Palm kernel oil fatty acids and Palm kernel fatty acids, saturated, C8+ could be covered by the entry Fatty acids, linear, C8-C18, saturated with C18 unsaturated;
- .2 Palm fatty acids C16+ could be covered by Fatty acids, unsaturated, linear, C16+;
- .3 Fatty acids, saturated, linear, C12+ was covered by Fatty acids, linear, C12+ saturated with C12+ unsaturated; and
- .4 C12 was the critical break point in the carbon chain which contributed to a change in the hazardous characteristic of a fatty acid in the aquatic environment whereas the irritation potential for mammals seems to change from C10-C14.

3.18 With the exception of Fatty acids (saturated, C13+), which is an existing IBC Code entry, the Group agreed to remove the descriptors for linearity and saturation/unsaturation of the carbon chain and consolidated the various entries as follows:

- .1 Coconut oil fatty acid;
- .2 Tallow fatty acid;
- .3 Fatty acids, C8-C18;
- .4 Fatty acids, C8-C10;
- .5 Fatty acids, C12+;
- .6 Fatty acid (saturated, C13+); and
- .7 Fatty acids, C16+.

¹ Entry classified by the ESPH Working Group under the amended IBC Code.

² Entry evaluated by the GESAMP/EHS Working Group.

Vegetable acid oils and fatty acid distillates

3.19 The Group recalled that a number of acid oils and distillates have already been submitted for evaluation, some of which had complete profiles:

Acid oils

- .1 Maize (corn) acid oil;
- .2 Acid oils from soyabean, corn (maize) and/or sunflower oil refining¹;
- .3 Palm acid oil¹;
- .4 Palm kernel acid oil¹;
- .5 Soyabean acid oil;
- .6 Sunflower seed acid oil; and
- .7 Rapeseed acid oil.

Vegetable Oil Distillates

- .1 Palm fatty acid distillate¹;
- .2 Palm kernel fatty acid distillate;
- .3 Coconut fatty acid distillate;
- .4 Maize (corn) fatty acid distillate;
- .5 Rapeseed fatty acid distillate;
- .6 Soyabean fatty acid distillate; and
- .7 Sunflowerseed fatty acid distillate.

3.20 Based on information provided by industry on the processes leading to the production of acid oils and distillates, the Group was informed that oils and fats are made up of triglycerides (triacylglycerols). The fatty acids are split off the glycerol backbone by natural processes, such as hydrolysis, the action of enzymes etc., which leads to the crude oils having a certain free fatty acid level at time of shipment. During the chemical refining of oils, the fatty acids are removed by the addition of sodium hydroxide to make the soapstock, which is then converted to acid oil by acidulation. This acid oil has a composition of about 50-85% fatty acids and about 50-15% triglycerides (with some moisture etc.). In the physical refining of oils, the fatty acids are removed by steam distillation, and this process results in the fatty acid distillate which has up to 95% fatty acids and a small amount of entrained oil. The key factor is that fatty acids which comprise these two classes of material have the same fatty acid profile as the oil which is being refined.

3.21 When discussing an approach to the consolidation of the many entries for acid oils and distillates originating from the base vegetable oils, the Group recalled that the hazard evaluation of vegetable oils is very much dependent on the carbon chain length of the component free fatty acids and can be divided into three major categories:

- .1 Palm kernel (nut) oil and coconut oil containing predominately C12 free fatty acids;
- .2 Palm oil containing predominately C16 free fatty acids; and
- .3 Soft oils, e.g. rapeseed, soyabean, corn oil containing predominately C18 free fatty acids.

¹ Entry classified by the ESPH Working Group under the amended IBC Code.

3.22 Whilst bearing in mind the existing entries in the IBC Code, the Group agreed to consolidate the vegetable acid oils and distillates as follows:

- .1 Acid oils from soyabean, corn (maize) and/or sunflower oil refining;
- .2 Palm kernel acid oil;
- .3 Palm kernel fatty acid distillate;
- .4 Coconut acid oil;
- .5 Coconut fatty acid distillate;
- .6 Palm acid oil;
- .7 Palm fatty acid distillate;
- .8 Vegetable acid oils (not otherwise specified); and
- .9 Vegetable fatty acid distillates (not otherwise specified).

3.23 The Group recommended that in future any acid oil derived from vegetable oil(s) which is not a current entry in the IBC Code could be considered as a synonym of one of the above.

Fatty alcohols

3.24 Within this group of products, the Group noted the following substances had been submitted for evaluation:

- .1 Alcohols (C13+)^{1,2};
- .2 Alcohols (C8-C11), primary, linear and essentially linear²;
- .3 Alcohols (C12-C13), primary, linear and essentially linear²;
- .4 Alcohols (C14-C18), primary, linear and essentially linear²;
- .5 Fatty alcohols, linear C12+;
- .6 Fatty alcohols, linear C16+;
- .7 C10-C12-C14 Fatty alcohols; and
- .8 Fatty alcohol C12+.

3.25 In reviewing the various entries, the Group noted that:

- .1 the chain lengths in Fatty alcohols, linear C12+, Fatty alcohols, linear C16+, and Fatty alcohols, linear C10-C12-C14 are not covered by any existing entries;
- .2 Fatty alcohol C12+ could be covered by the entry Fatty alcohols, linear C12+; and
- .3 there was no need to qualify alcohols by a descriptor which denoted the origin of the product.

3.26 The Group subsequently agreed to consolidate the group of alcohols as follows:

- .1 Alcohols (C13+);
- .2 Alcohols (C8-C11), primary, linear and essentially linear;
- .3 Alcohols (C12-C13), primary, linear and essentially linear;
- .4 Alcohols (C14-C18), primary, linear and essentially linear;
- .5 Alcohols, linear C12+;
- .6 Alcohols, linear C16+; and
- .7 Alcohols, C10-C14.

¹ Entry classified by the ESPH Working Group under the amended IBC Code.

² Entry evaluated by the GESAMP/EHS Working Group.

3.27 Due to time constraints, the Group agreed to defer the evaluation of this group of products to its next session.

Polyols

3.28 The Group recalled that at EHS 42, it had carried out an inventory of the entries it had evaluated over time and assigned ratings as appropriate, recognizing that more work may be needed.

3.29 At the request of ISOPA, an affiliate of CEFIC, the Group re-investigated the column B1 rating of Glycerol propoxylated and ethoxylated on the basis of additional ecotoxicity data and written arguments and agreed that the weight of evidence supported a rating of "1" instead of "3".

3.30 For ease of locating the product in the GESAMP/EHS Composite List of Hazard Profiles, the Group proposed to amend the name of the product "Blend of glycerol/sucrose propoxylated and ethoxylated" to "Glycerol/sucrose blend propoxylated and ethoxylated".

3.31 Based on the information received, the Group agreed to develop a hazard profile for Glycerol/sorbitol propoxylated and ethoxylated, noting that additional information would be required on human health in order to complete the hazard profile. The Group requested the Technical Secretary to liaise with ISOPA in this regard.

3.32 The Group noted that the product Voratec SD 302 had been submitted for evaluation at EHS 42 with its chemical name listed as Polyalkylene oxide polyol. As part of the revision of IBC Code products, only those polyols with specific names have been evaluated. At EHS 42, in carrying out its work on polyols, the Group had agreed that polyalkylene oxide polyol was too broad a descriptor which would allow almost any polyol to be carried under this entry and refrained from carrying out an evaluation of the entry - Polyalkylene oxide polyol. The Group proposed the name of Glucitol/Glycerol blend propoxylated containing <10% amine for Voratec SD 302, and requested the Technical Secretary to liaise with manufacturers in this regard. The Group noted that the GESAMP/EHS Product Data Reporting Form indicates that the hazard data cited refers to specific components but does not indicate which ones. Columns A and B have been rated by analogy with Glycerol propoxylated.

Dialky(C₉-C₁₀) phthalates

3.33 The Group completed the hazard profile for Dialky (C₉-C₁₀) phthalates, which due to time constraints had been deferred to this session from EHS 42. In the process, the Group completed the profiles for Diisononyl phthalate and Diisodecyl phthalate.

3.34 The resultant hazard profiles for these products belonging to the chemical groups of existing products described above are integrated in annex 4.

4 RE-EVALUATION OF PRODUCTS OMITTED FROM THE IBC CODE DUE TO MISSING DATA FOLLOWING RECEIPT OF ADDITIONAL INFORMATION

4.1 The Group noted that additional information on the following products had been received and took this into account when re-evaluating the products:

- .1 Alkyl (C₈) amine, alkenyl (C₁₂+) acid ester mixture;
- .2 Alkyl (C₁₂+) dimethylamine;
- .3 Ammonium polyphosphate solution;
- .4 Cashew nut shell oil;

- .5 Coal tar pitch (molten);
- .6 Creosote (coal tar);
- .7 1,6-Dichlorohexane;
- .8 2,4-Dichlorophenoxy acetic acid triisopropanolamine salt;
- .9 Diethylene glycol diethyl ether;
- .10 Dodecylamine/tetradecylamine mixture;
- .11 Ethyl acrylate;
- .12 Ethylene-vinyl acetate co-polymer;
- .13 Fluorosilicic acid (20-30%) in water;
- .14 1,6-Hexanediol distillation overheads;
- .15 Latex, ammonia (1% or less), inhibited;
- .16 Palm kernel acid oil;
- .17 1,3-Pentadiene;
- .18 Polyether (molecular weight 2000+);
- .19 Polyethylene polyamines;
- .20 Pyridine;
- .21 Tall oil (crude and distilled);
- .22 Vegetable protein solution (hydrolysed); and
- .23 Vinyl ethyl ether.

4.2 The resultant hazard profiles for these products are set out at annex 5.

4.3 In considering this information, the Group made the following observations:

- .1 Alkyl (C8) amine, alkenyl (C12+) acid ester mixture – consideration was given to the chemical structure provided by the manufacturer. The Group agreed that the name was no longer appropriate; the two ingredients are reactive and it is unlikely to be a mixture. Furthermore, the name does not adequately reflect the structure;

The Group was unable to accept the manufacturer's contention that the hazard could be derived separately from the individual profiles of the alkylamine and the alkenyl acid parts of the molecule. Should the two parts of the molecule hydrolyse rapidly, then this needs to be demonstrated. The substance is likely to have surfactant properties similar to alkyl ethoxylates or linear alkyl sulphonates and therefore to have environmental issues (in particular columns A1a, A2 and B1) which need addressing by the provision of data on the substance itself;

The column B1 rating of "1" for ecotoxicity originates from a BCH 18/INF.9 reporting form. However, supporting data are not available. For this reason, an "NI" rating has been returned to column B1 until such time as the original data can be provided signifying that the essential data for classification required by IMO remains missing;

- .2 Ammonium polyphosphate solution – based on IUCLID data, columns D1 and D2 were assigned ratings of "1" and "0" respectively. Consequently, column E3 was amended to "1";
- .3 Cashew nut shell oil - in light of additional information which indicated that anacardic acid which is the main component of cashew nut shell oil is sparingly water-soluble and forms a sodium salt in salty water, which is reported to be more soluble than the acid whilst the cardanols and cardols (the remaining component of the cashew nut shell oil) is an irritant, the rating in column D2 was amended to "(2)";

- .4 Creosote – the extensive information provided by industry, in particular on the composition of creosote, was noted with a view that the product could be re-evaluated using a weighted approach based on main components. Due to time constraints, the Group agreed to complete the work by correspondence and tasked the Chairman of the Group to present its results at the next meeting of the ESPH Working Group (4 - 8 September 2006);
- .5 1,6-Dichlorohexane – based on additional data provided by industry, the ratings for columns C1, C2, C3, D1 and D1 were confirmed;
- .6 2,4-Dichlorophenoxyacetic acid triisopropanolamine salt - based on additional information provided by a manufacturer, it was agreed to amend the ratings in columns A1 and B1 from “1” to “0” and from “3” to “2” respectively. The Group agreed to retain a rating of “N1” in column B2;
- .7 Diethylene glycol diethyl ether – based on eye irritation information and by analogy to diethylene glycol dibutyl ether, column D1 was assigned a rating of “(2)”;
- .8 Ethyl acrylate – the product is currently listed as Group 2B carcinogen in IARC and hence the notation “C” was confirmed for column D3;
- .9 Ethylene-vinyl acetate co-polymer – based on the data submitted, columns D1 and D2 were assigned a rating of “2” and “0” respectively. Consequently, the rating in column C3 was assigned “(2)”;
- .10 Fluorosilicic acid (20-30%) in water - see paragraph 2.5;
- .11 1,6-Hexanediol distillation bottoms – based on information provided by industry, the rating of “N1” in column A2 was amended to “NR”. With this information, the hazard profile was complete. The Group noted that this product did not feature on the list of products omitted from the IBC Code due to missing data but appeared in List 1 of the MEPC.1/Circ.11 with assigned carriage requirements applicable to “all countries” and “no expiry date”;
- .12 Latex, ammonia (1% or less), inhibited – the data was reviewed and the ratings for columns A1, A2, B1 and B2 were confirmed. The brackets were removed from all columns concerning human health with the exception of column C3. Column C3 was amended to “(1)” based on the rationale developed for estimating column C3. Consequently, column E3 was amended to “1”;
- .13 Palm kernel acid oil – it was brought to the attention of the Group that currently the rating for B1 for Coconut oil fatty acid is “0” and that for Palm kernel acid oil is “(4)”. In both products, lauric acid is the predominant carboxylic acid present being 47-49% in the case of Coconut oil fatty acid and 42-55% in the case of Palm kernel acid oil;

Industry provided information which pointed out that Coconut oil fatty acid has a much higher content of fatty acids than Palm kernel acid oil, and that the content of free C8 and C10 short chain fatty acids is 3-4 times more in the case of Coconut oil fatty acid;

On the basis of this information, and since fatty acids are part of many organisms’ metabolism whilst bioconcentration in the usual sense would have no meaning in

terms of hazard to the marine environment for such products, the Group agreed that for Palm kernel acid oil, Palm kernel fatty acid distillate and Coconut fatty acid distillate to replace the rating of “4” or “(4)” in column A1 with “0”;

The column B1 ratings of all three products were adjusted to a “3” to reflect the presence of substantial quantities of lauric acid in view of the presence of roughly equal proportions of non-toxic triglycerides and long chain fatty acids;

- .14 1,3-Pentadiene – based on the Screening Information Dataset (SIDS) assessment report for the product, columns D1 and D2 were assigned “1” and “(2)” respectively and column C3 amended to read “0”;
- .15 Polyether (Molecular weight 2000+) – the Group had previously assumed that this IBC Code entry would be omitted from the Code due to lack of data. However, data received since EHS 42 enabled a complete profile to be developed. The Group noted that the name of the entry may require further consideration by the ESPH Working Group since the minimum molecular weight of the product described in the data submitted is 1350;
- .16 Polyethylene polyamines – a hazard profile was issued at EHS 42, i.e. taking into account both the hazard of the product and its carrier oil C5-C20 paraffin oil. Correspondence with another manufacturer has indicated that the product is also carried without paraffin oil and the Group was requested to provide an additional profile to cover this product. In this regard, the Group agreed to the following hazard profiles:

Polyethylene polyamines (>50% C5-C20 paraffin oil)

Hazard	A1A	A1B	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Profile	(5)	NI	(5)	NR	3	0	0	(1)	(3)	(2)	(3)	S		Fp	0

Polyethylene polyamines

Hazard	A1A	A1B	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Profile	0	NI	0	NR	3	0	1	0	(3)	2	(3)	S		Fp	0

It should be noted that the data indicate similar B1 ratings for the paraffin oil and for one of the main components of the Polyethylene polyamines;

The Group recommended that in view of the above, the ESPH Working Group may wish to create two entries for the product in the amended IBC Code;

- .17 Tall oil (crude and distilled) – based on information provided by industry, the Group assigned a CAS No. of 8002-26-4 in the GESAMP/EHS Composite List of Hazard Profiles for the product;

- .18 Vegetable Protein Solution (hydrolysed) - this was a product which featured in the IBC Code when adopted in 2004 by the IMO and strictly speaking did not fall within the list of substances related to missing data for products which were submitted prior to 31 December 2005. Nevertheless, compositional information was received from a manufacturer, with data supporting a rating of "R" in column A2 for the major components of this product;
- .19 Vinyl ethyl ether - the rating in column E3 was amended to "2" based on the flash point value of <23°C.

5 EVALUATIONS OF COLUMN E3

- 5.1 The Group considered that the GESAMP/EHS Composite List of Hazard Profiles was substantially complete. In this regard and where appropriate, the Group was able to revise column E3 as this is supported by data on environmental and human health hazard from column C, D and E2.
- 5.2 The results of this exercise are integrated in annex 4.

6 CATEGORY 3 CARCINOGEN WITH LABEL R40 UNDER EU CLASSIFICATION AND COLUMN D3 IN THE GESAMP HAZARD PROFILE

6.1 Following a request by CEFIC to examine the removal of the notation C (carcinogen) in column D3 for those substances in the GESAMP/EHS Composite List of Hazard Profiles which are considered Category 3 carcinogen with label R40 under EU classification, the Group noted that the EU classification criteria are not applied for any GESAMP ratings. The Group underlined, as outlined in the GESAMP Reports and Studies No.64, that the ratings are derived from the UN GHS and in the case of conflicting evaluation results, the Group gives priority to evaluation reports prepared by international experts, in particular those published by the International Agency for the Research on Cancer (IARC) of WHO.

7 INCONSISTENCIES BETWEEN HAZARD PROFILES AND IBC CODE TRANSPORT REQUIREMENTS

- 7.1 The Group reviewed a document submitted by Japan pointing to certain inconsistencies between the hazard profiles and the IBC Code requirements. In most instances, the E2 rating for these substances was reviewed and confirmed. In these cases, the Group recommended that the ESPH Working Group may wish to review the transport requirements. In some instances where "NI" is listed in the document, the Group located additional data and established a rating.
- 7.2 The resultant ratings are set out at annex 6.

8 ANY OTHER BUSINESS

Publication of the GESAMP/EHS Composite List of Hazard Profiles

- 8.1 Following the substantial work carried out at this session on a number of products, the Group agreed to publish an updated version of the 2006 Composite List of Hazard Profiles (set out at annex 4).
- 8.2 The Group noted that for the last four sessions (EHS 40, 41, 42 and 43) it had, upon request of IMO, focussed mainly on substances with incomplete profiles and that due to time constraints had refrained from continuing the regular process of cross-checking ratings of chemicals within homologous series.
- 8.3 The Group noted in the interests of data integrity and the accuracy of the rating, this exercise is of paramount importance.

Submission of data to the GESAMP/EHS Working Group and IMO

8.4 The Group, once again, drew the attention of industry to the procedure following submission of a new product to the GESAMP/EHS Working Group. Submission to the GESAMP/EHS Working Group is the first step in the classification of a product under the IBC Code and once the product has a complete profile, it should be submitted to the IMO for the assignment of pollution category, ship type and carriage requirements under the IBC Code. Manufacturers should contact their national Administration or the appropriate non-governmental organizations in consultative status with IMO for guidance if they are not familiar with the process. More information on the process can be found at <http://www.imo.org>: click on *marine environment*: click on *chemical reporting forms*.

Expression of appreciation

8.5 The Group was informed that Professor Meiko Wakabayashi would be retiring from the Group and that this would be her last meeting. The Group expressed its gratitude for her untiring efforts and her contribution to the work of the Group. In particular, the Group thanked her for her contribution to the successful outcome of the Aquatic Toxicology Sub-Group meetings held in Japan. The Group wished her a happy retirement.

9 FUTURE WORK PROGRAMME AND DATES OF THE FOLLOWING SESSIONS

9.1 The Group agreed to the future work programme which is set out in annex 7.

9.2 The Group re-confirmed that the next regular meeting would be tentatively held from 23 to 27 April 2007. **Submissions for the April 2007 regular meeting should reach the *Technical Secretary of the GESAMP/EHS Working Group not later than 15 March 2007.**

10 CONSIDERATION AND ADOPTION OF THE REPORT

10.1 The Group adopted the report and, having thanked members for the considerable amount of effort, including extensive preparatory work, *inter alia*, the collection, collation and evaluation of data to generate the *Revised Hazard Profiles*, the Chairman closed the session on Thursday, 8 June 2006 at 17:00 hrs.

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ANNEX 1

**LIST OF MEMBERS ATTENDING THE FORTY-THIRD SESSION
OF THE GESAMP/EHS WORKING GROUP**

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ANNEX 2

**AGENDA FOR THE FORTY-THIRD SESSION OF
THE GESAMP/EHS WORKING GROUP**

- 1 Adoption of the agenda
- 2 Matters arising from IMO and other Organizations relevant to the activities of the Working Group
 - .1 Translation of the notation “Inorg” in column A2 for regulatory purposes under MARPOL Annex II and the IBC Code
- 3 Evaluation of the following groups of existing products:
 - .1 Vegetable oils/derivatives:
 - i) Vegetable oils;
 - ii) Fatty acid methyl esters (FAME);
 - iii) Fatty acids;
 - iv) Vegetable acid oils and distillates;
 - v) Fatty alcohols;
 - .2 Polyols; and
 - .3 Dialkyl (C9-C10) phthlates
- 4 Re-evaluation of products omitted from the IBC Code due to missing data following receipt of additional information
- 5 Evaluation of column E3
- 6 Category 3 carcinogen with label R40 under EU classification and column D3 in the GESAMP Hazard Profile
- 7 Inconsistencies between hazard profiles and IBC Code transport requirements
- 8 Any other business
 - .1 Publication of the GESAMP/EHS Composite List of hazard profiles
 - .2 Submission of data to the GESAMP/EHS Working Group and IMO
- 9 Future work programme and dates of the following sessions
- 10 Consideration and adoption of the report

ANNEX 3

**TRANSLATION OF THE NOTATION “INORG” IN COLUMN A2 FOR
REGULATORY PURPOSES UNDER MARPOL ANNEX II AND THE IBC CODE**

COMPOUND	Entries in IBC Code	RATINGS	
		E2	A2
Aluminium chloride (30% or less)/hydrochloric acid (20% or less) solution		D	R
Aluminium sulphate solution	X	D	R
Ammonia aqueous (28% or less)	X		
Ammonium hydrogen phosphate solution	X	D	R
Ammonium nitrate solution (93% or less)	X	D	R
Ammonium polyphosphate solution	X	D	R
Ammonium sulphate solution	X	D	R
Ammonium sulphide solution (45% or less)	X	D	R
Ammonium thiocyanate (25% or less)/ammonium thiosulphate (20% or less) solution		D	R
Ammonium thiosulphate solution (60% or less)	X	D	R
Calcium carbonate slurry	X	S	NR
Calcium hydroxide slurry	X	S	NR
Calcium hypochlorite solution (15% or less)	X	D	R
Calcium hypochlorite solution (more than 15%)	X	D	R
Calcium nitrate magnesium nitrate/potassium chloride solution	X	D	R
Calcium nitrate solutions (50% or less)	X	D	R
Carbon disulphide	X	SD	R
Chlorosulphonic acid	X	D	R
Clay slurry	X	S	NR
Coal slurry	X	S	NR
Drilling brines (containing zinc salts)	X	D	R
Drilling brines, including: calcium bromide solution, calcium chloride solution and sodium chloride solution	X	D	R
Ferric chloride solutions	X	D	R
Ferric nitrate/nitric acid solution	X	D	R
Fluorosilicic acid		D	R
Fluorosilicic acid (20-30%) in water solution		D	R
Hydrochloric acid	X	DE	R
Hydrogen peroxide (more than 60%)		D	R
Hydrogen peroxide solutions (over 60% but not more than 70% by mass)	X	D	R
Hydrogen peroxide solutions (over 8% but not over 60% by mass)	X	D	R
Kaolin slurry	X	S	NR
Magnesium chloride solution	X	D	R
Microsilica slurry		S	NR

COMPOUND	Entries in IBC Code	RATINGS	
		E2	A2
Nitrating acid (mixture of sulphuric and nitric acids)	X	D	R
Nitric acid (70% and over)	X	D	R
Nitric acid (less than 70%)	X	D	R
Oleum	X	D	R
Phosphoric acid	X	D	R
Phosphorous, yellow or white	X	S	NR
Polyaluminium chloride solution	X	D	R
Polyferric sulphate solution	X	D	R
Potassium chloride brine		D	R
Potassium chloride solution (10% or more)	X	D	R
Potassium hydroxide solution	X	D	R
Potassium thiosulphate (50% or less)	X	D	R
Sodium aluminate solution		D	R
Sodium aluminosilicate slurry	X	S	NR
Sodium borohydroxide (15% or less)/sodium hydroxide solution	X	D	R
Sodium carbonate solution	X	SD	R
Sodium chlorate solution (50% or less)	X	D	R
Sodium dichromate solution (70% or less)	X	D	R
Sodium hydrogen sulphide (6% or less)/sodium carbonate (3% or less) solution	X	D	R
Sodium hydrogen sulphite solution (45% or less)	X	D	R
Sodium hydrosulphide/ammonium sulphide solution	X	D	R
Sodium hydrosulphide solution (45% or less)	X	D	R
Sodium hydroxide solution	X	D	R
Sodium hypochlorite solution (15% or less)	X	D	R
Sodium hypochlorite solution (full strength solution)		D	R
Sodium nitrate		D	R
Sodium nitrite (solid)		SD	R
Sodium nitrite solution	X	SD	R
Sodium perborate monohydrate		SD	R
Sodium silicate solution	X	D	R
Sodium sulphate solutions	X	SD	R
Sodium sulphide		SD	R
Sodium sulphide solution (15% or less)	X	D	R
Sodium sulphite solution (25% or less)	X	D	R
Sodium thiocyanate solution (56% or less)	X	D	R
Sulphur (molten)	X	S	NR
Sulphuric acid	X	D	R
Sulphuric acid spent	X	D	R
Titanium dioxide slurry	X	S	NR
Water	X	D	R
Zinc bromide solutions		D	R
Zinc chloride		D	R

ANNEX 4 - GESAMP/EHS COMPOSITE LIST

New GESAMP Hazard Profiles

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Acetic acid	13	0	0	0	R	1	NI	1	1	1	3C	3		NI	D	3
	64	RTECS No			AF1225000			CAS No:			64-19-7					
Acetic anhydride	12	0	0	0	R	1	NI	1	0	2	3	3	A	NI	D	3
	65	RTECS No			AK1925000			CAS No:			108-24-7					
Acetochlor	2047	3	2	2	NR	4	NI	1	0	(1)	0	0	S	NI	S	2
	66	RTECS No			AB5457000			CAS No:			34256-82-1					
Acetone	15	0	0	0	R	0	0	0	0	0	1	2		NT	DE	2
	67	RTECS No			AL3150000			CAS No:			67-64-1					
Acetone cyanohydrin	14	0	0	0	R	4	NI	3	4	3	(3)	(3)		NI	D	3
	68	RTECS No			OD9275000			CAS No:			75-86-5					
Acetonitrile	16	0	0	0	R	1	NI	1	1	2	1	2		NI	D	2
	69	RTECS No			AL7700000			CAS No:			75-05-8					
Acetonitrile (Low purity grade)	2333	0	NI	0	R	3	NI	1	1	2	1	2		NI	D	2
	2876	RTECS No						CAS No:								
Acid oil mixture from soyabean, corn (maize) and sunflower oil refining	2306	(0)	NI	(0)	(R)	(0)	NI	0	(0)	(1)	(1)	1		NI	Fp	2
	3036	RTECS No						CAS No:								
Acrylamide solution (50% or less)	23	0	0	0	R	2	0	2	2	(2)	1	2	CMNS	NI	D	3
	70	RTECS No			AS3325000			CAS No:			79-06-1					
Acrylic acid	24	0	0	0	R	4	NI	2	2	2	3C	3		NI	D	3
	71	RTECS No			AS4375000			CAS No:			79-10-7					
Acrylonitrile	25	0	2	2	NR	3	0	2	2	2	2	2	CSM	NT	DE	3
	72	RTECS No			AT5250000			CAS No:			107-13-1					
Acrylonitrile-Styrene copolymer dispersion in polyether polyol	1432	NI	0	0	NI	1	NI	0	(0)	(0)	0	(0)		NI	S	0
	73	RTECS No						CAS No:			9003-54-7					

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Adiponitrile	26	0	0	0	R	1	NI	3	(3)	3	3	(3)		NI	FD	3
	74	RTECS No			AV2625000			CAS No:			111-69-3					
Alachlor technical (90% or more)	1488	3	3	3	NI	4	1	1	0	(2)	1	0	CS	NI	S	3
	75	RTECS No			AE1225000			CAS No:			15972-60-8					
Alcoholic beverages, n.o.s.	293	0	0	0	R	0	0	0	0	0	0	1		NI	D	1
	85	RTECS No			CAS No:											
Alcohol (C9-C11) poly (2.5-9) ethoxylate	2094	3	3	3	R	3	NI	1	0	(2)	(2)	(2)		NI	D	2
	2209	RTECS No			CAS No:											
Alcohol (C6-C17) (secondary) poly(3-6)ethoxylates	722	4	3	3	R	4	2	0	(0)	(3)	3	2		NI	D	3
	81	RTECS No			CAS No:											
Alcohol (C6-C17) (secondary) poly(7-12)ethoxylates	295	3	3	3	R	4	1	1	0	(3)	3	3		NI	D	3
	80	RTECS No			CAS No:											
Alcohol (C12-C16) poly(1-6)ethoxylates	294	5	3	3	R	4	1	0	0	(2)	2	2		NI	FD	2
	77	RTECS No			CAS No:						68131-39-5					
Alcohol (C12-C16) poly(20+)ethoxylates	1482	4	(3)	(3)	R	2	0	(0)	(0)	(2)	2	1		NI	D	2
	78	RTECS No			CAS No:											
Alcohol (C12-C16) poly(7-19)ethoxylates	1481	4	3	3	R	4	1	1	0	(3)	3	3		NI	D	3
	79	RTECS No			CAS No:											
Alcohols (C13+)	2039	5	2	2	R	4	1	0	0	0	(1)	(1)		NI	Fp	2
	86	RTECS No			CAS No:						90604-31-2					
Alcohols C10-C14	2365	NI	NI		NI	NI	NI	0	0	(2)	(2)	(2)		NI	Fp	2
	3128	RTECS No			CAS No:											
Alcohols (C8-C11), primary, linear and essentially linear	2279	5	2	2	(R)	(3)	(1)	(0)	(0)	(2)	(2)	(2)		NI	Fp	2
	2887	RTECS No			CAS No:											
Alcohols (C12-C13), primary, linear and essentially linear	2294	5	2	2	R	4	(1)	0	0	(1)	1	1		NI	Fp	2
	2950	RTECS No			CAS No:											

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Alcohols (C14-C18), primary, linear and essentially linear	2293	5	2	5	R	0	1	0	0	(1)	1	1		NI	Fp	2
	2951	RTECS No						CAS No:			67762-30-5					
Alkanes (C6-C9)	2202	(5)	NI	(5)	(R)	(4)	NI	(0)	(0)	(1)	(2)	(2)	N	NI	FE	2
	88	RTECS No						CAS No:								
Iso- and cyclo-alkanes (C10-C11)	2203	(5)	NI	(5)	NI	(0)	(0)	(0)	(0)	(1)	(1)	(0)		NI	F	1
	393	RTECS No						CAS No:								
Iso- and cyclo-alkanes (C12+)	2204	(5)	NI	(5)	NI	(0)	NI	0	0	(1)	NI	NI		NI	NI	1
	394	RTECS No						CAS No:			112-40-3					
n-Alkanes (C10+)	296	(5)	NI	(5)	(R)	(0)	(0)	(0)	(0)	(1)	(1)	(0)	A	NI	F	3
	471	RTECS No						CAS No:								
Alkaryl polyethers (C9-C20)	1974	4	NI	4	NR	3	NI	0	0	(3)	2	3		NI	S	2
	90	RTECS No						CAS No:			26027-38-3					
Alkenyl (C11+) amide	1858	3	NI	3	(NR)	4	NI	0	(0)	(1)	0	1		NI	Fp	2
	838	RTECS No						CAS No:								
Alkenyl (C16-C20) succinic anhydride	298	0	0	0	NR	1	NI	0	0	(2)	2	(2)	S	NI	FD	2
	2336	RTECS No						CAS No:								
Alkyl acrylate-vinylpyridine copolymer in toluene	299	2	2	2	R	2	0	0	0	(2)	2	2	RNA	NI	F/Fp	3
	94	RTECS No						CAS No:								
Alkyl(C8+)amine, Alkenyl (C12+) acid ester mixture	1433	NI	NI	NI	NI	1	NI	(0)	(0)	NI	NI	NI	S	NI	Fp	3
	98	RTECS No						CAS No:								
Alkylaryl phosphate mixtures (more than 40% Diphenyl tolyl phosphate, less than 0.02% ortho-isomers)	2267	4	4	4	R	4	4	0	0	(0)	NI	NI		NI	S	NI
	280	RTECS No						CAS No:			26444-49-5					
Alkylated (C4-C9) hindered phenols	2273	0	2	0	NR	1	0	1	0	(2)	1	1		NI	Fp	2
	2575	RTECS No						CAS No:								
Alkylbenzene, alkylindane, alkylindene mixture (each C12-C17)	1872	0	4	4	NR	0	NI	0	0	0	0	2		NI	FE	2
	103	RTECS No						CAS No:								

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Alkyl benzene distillation bottoms	300 3106	0	2	2	NR	0	(3)	0	0	1	1	1		NI	Fp	2
		RTECS No						CAS No:								
Alkylbenzene mixtures (containing at least 50% of toluene)	2303 2909	(2)	(2)	(2)	(R)	(3)	(0)	0	0	(2)	2	2	ACMNR	NI	FE	3
		RTECS No						CAS No:			68527-23-1					
Alkyl (C3-C4) benzenes	2206 91	(3)	NI	(3)	R	4	NI	0	0	(2)	(2)	(1)		NI	FE	2
		RTECS No						CAS No:								
Alkyl (C5-C8) benzenes	2207 92	5	4	4	NI	4	NI	0	0	(2)	(2)	(1)		NI	F	2
		RTECS No						CAS No:								
Alkyl(C9+)benzenes	1783 100	0	4	4	NR	1	NI	0	(0)	(1)	(1)	(1)		NI	F	1
		RTECS No						CAS No:								
Alkyl (C11-C17) benzene sulphonic acid	1739 101	NI	NI	3	R	3	1	1	(1)	(2)	(1)	(1)		NI	D	2
		RTECS No						CAS No:			27176-87-0					
Alkylbenzene sulphonic acid, sodium salt solution	301 102	3	3	3	R	3	1	1	(1)	(3)	2	3		NI	FD	3
		RTECS No			DB4370000			CAS No:			42615-29-2					
Alkyl (C12+) dimethylamine	2248 2485	3	NI	3	R	5	2	1	(1)	(3)	3C	3		NI	F	3
		RTECS No						CAS No:								
Alkyl dithiocarbamate (C19-C35)	2236 2538	0	NI	0	NI	1	NI	0	0	(0)	0	0		NI	S	0
		RTECS No						CAS No:								
Alkyldithiothiadiazole (C6-C24)	1981 104	5	NI	5	NR	1	NI	0	0	(0)	0	0		NI	S	2
		RTECS No						CAS No:								
Alkyl ester copolymer (C4-C20)	1986 2202	NI	0	0	NR	0	NI	0	0	(0)	0	0		NI	Fp	2
		RTECS No						CAS No:								
Alkyl (C8-C10)/(C12-C14):(40% or less/60% or more) polyglucoside solution (55% or less)	2134 2248	3	NI	3	R	3	0	0	0	(3)	2	3		NI	D	3
		RTECS No						CAS No:			141464-42-8					
Alkyl (C8-C10)/(C12-C14):(60% or more/40% or less) polyglucoside solution(55% or less)	2135 2246	3	NI	3	R	2	0	0	0	(2)	2	2		NI	D	2
		RTECS No						CAS No:			141464-42-8					

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Alkyl (C7-C9) nitrates	8	4	NI	4	NR	4	NI	0	0	(3)	2	(3)	S	NI	F	3
	93	RTECS No						CAS No:			27247-96-7					
Alkyl(C7-C11)phenol poly(4-12) ethoxylate	1063	4	NI	4	NR	3	1	0	0	(2)	2	1		NI	D	2
	97	RTECS No						CAS No:								
Alkyl (C8-C40) phenol sulphide	1985	0	NI	0	NR	0	NI	0	0	(1)	1	1		NI	FD	1
	2253	RTECS No						CAS No:								
Alkyl (C8-C9) phenylamine in aromatic solvents	2096	2	NI	2	NR	3	NI	(0)	(0)	(2)	2	2		NI	S	2
	2200	RTECS No						CAS No:								
Alkyl (C9-C15) phenyl propoxylate	2188	0	NI	0	NR	0	NI	0	0	(2)	2	2		NI	FD	2
	2430	RTECS No						CAS No:								
Alkyl (C8-C10)/(C12-C14):(50%/50%) polyglucoside solution (55% or less)	2133	3	NI	3	R	2	0	0	0	(3)	2	(3)		NI	D	3
	2247	RTECS No						CAS No:								
Alkyl (C12-C14) polyglucoside solution (55% or less)	2137	3	NI	3	R	3	0	0	0	(3)	2	3		NI	D	3
	2249	RTECS No						CAS No:			110615-47-9					
Alkyl (C8-C10) polyglucoside solution (65% or less).	2136	1	NI	1	R	2	0	0	0	(2)	2	2		NI	D	2
	2245	RTECS No						CAS No:			68515-73-1					
Alkyl(C10-C20, saturated and unsaturated) phosphite	2108	0	NI	0	R	1	NI	0	0	(0)	0	0		NI	Fp	2
	96	RTECS No						CAS No:								
Alkyl sulphonic acid ester of phenol	1878	5	NI	5	NR	0	NI	0	(0)	(0)	0	0		NI	S	0
	1701	RTECS No						CAS No:			91082-17-6					
Allyl alcohol	28	0	0	0	R	4	NI	2	3	4	2	3	A	NI	D	3
	105	RTECS No			BA5075000			CAS No:			107-18-6					
Allyl chloride	478	1	1	1	R	3	NI	1	0	2	1	3	T	NI	E	3
	106	RTECS No			UC7350000			CAS No:			107-05-1					
Aluminium chloride (30% or less)/Hydrochloric acid (20% or less) solution	336	Inor	NI	2	Inorg	3	1	1	NI	3	(3C)	3		NI	D	3
	110	RTECS No						CAS No:								

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Aluminium sulphate solution	2205	Inor	Inor	2	Inorg	3	1	1	(0)	(3)	(2)	(3)		NI	D	3
	111	RTECS No			CAS No:											
2-(2-Aminoethoxy) ethanol	75	0	0	0	NR	1	0	0	1	(3)	3	3		NI	D	3
	37	RTECS No KJ6125000			CAS No:			929-06-6								
Aminoethyldiethanolamine/Aminoethylethanolamine solution	74	Inor	0	0	NR	1	0	1	(1)	(3)	(3B)	(2)	S	NI	D	3
	113	RTECS No			CAS No:											
Aminoethyl ethanolamine	68	0	0	0	NR	1	0	0	0	0	3B	2	S	NI	D	3
	112	RTECS No KJ6300000			CAS No:			111-41-1								
N-Aminoethylpiperazine	88	0	0	0	NR	1	NI	0	2	(3)	3	3	S	NI	D	3
	472	RTECS No TK8050000			CAS No:			140-31-8								
2-Amino-2-hydroxymethyl-1,3-propanediol solution (40% or less)	89	0	NI	0	NI	1	NI	0	0	NI	NI	NI		NI	D	NI
	38	RTECS No TY2900000			CAS No:			77-86-1								
2-Amino-2-methyl-1-propanol	90	0	0	0	NR	1	NI	0	0	(0)	NI	NI		NI	DE	NI
	39	RTECS No UA5950000			CAS No:			124-68-5								
Ammonia aqueous (28% or less)	91	0	0	0	R	3	2	1	(2)	3	3	3		NI	DE	3
	114	RTECS No BO0875000			CAS No:			1336-21-6								
Ammonium bisulphite solution (70% or less)	1730	NI	NI	NI	NI	1	NI	NI	NI	NI	2	2		NI	D	2
	115	RTECS No WT3595000			CAS No:			10192-30-0								
Ammonium hydrogen phosphate solution	98	0	0	0	Inorg	1	NI	0	0	0	(1)	(1)		NI	D	1
	117	RTECS No			CAS No:			7783-28-0								
Ammonium lignosulphonate solutions	2086	0	NI	0	NR	0	NI	0	(0)	(0)	0	0		NI	D	0
	118	RTECS No			CAS No:			8061-53-8								
Ammonium nitrate solution (93% or less)	1912	Inor	0	0	Inorg	1	NI	0	0	(2)	1	2		NI	D	2
	119	RTECS No			CAS No:											
Ammonium polyphosphate solution	1764	Inor	0	0	Inorg	1	NI	0	0	0	1	0		NI	D	1
	120	RTECS No			CAS No:			10-34-0								

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Ammonium sulphate solution	99	0	0	0	Inorg	1	(0)	0	(0)	(0)	0	0		NI	D	0
	121	RTECS No			BS4500000			CAS No:						7783-20-2		
Ammonium sulphide solution (45% or less)	310	Inor	0	0	Inorg	3	NI	1	0	(2)	2	2	N	NI	D	2
	122	RTECS No			BS4900000			CAS No:						12124-99-1		
Ammonium thiocyanate (25% or less)/Ammonium thiosulphate (20% or less) solution	1732	Inor	0	0	Inorg	1	NI	1	NI	NI	NI	NI		NI	D	NI
	123	RTECS No						CAS No:								
Ammonium thiosulphate solution (60% or less)	312	Inor	0	0	Inorg	1	NI	0	(0)	(1)	(1)	(1)		NI	D	1
	124	RTECS No			XN6465000			CAS No:						7783-18-8		
Amyl acetate (all isomers)	255	2	2	2	NR	2	NI	0	(0)	0	1	1	S	NT	FED	2
	125	RTECS No			AJ1925000			CAS No:						628-63-7		
n-Amyl alcohol	1110	1	1	1	(R)	1	0	1	0	(3)	2	3		NI	FED	3
	473	RTECS No			SB9800000			CAS No:						71-41-0		
Amyl alcohol, primary	965	1	1	1	(R)	1	0	1	0	(2)	2	2		NI	FED	2
	126	RTECS No			EL5425000			CAS No:						71-41-0		
sec-Amyl alcohol	1111	1	1	1	R	1	0	0	(0)	(2)	2	2		NI	D	2
	637	RTECS No			SA4900000			CAS No:						6032-29-7		
tert-Amyl alcohol	964	1	1	1	R	1	0	1	1	1	3	2		NI	D	3
	685	RTECS No			SC0175000			CAS No:						75-85-4		
tert-Amyl methyl ether	2141	1	NI	1	NI	4	NI	1	0	(2)	0	1		NI	ED	2
	2210	RTECS No						CAS No:						994-05-8		
Aniline	261	0	0	0	R	3	2	2	2	3	1	3	CTS	NT	FD	3
	127	RTECS No			BW6650000			CAS No:						62-53-3		
Animal and fish acid oils and distillates, n.o.s., including:	263	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	S	NI	Fp	3
	128	RTECS No			ED0780000			CAS No:						8001-85-2		
Apple juice	275	0	NI	0	R	0	0	0	0	0	0	0		NI	D	0
	130	RTECS No						CAS No:								

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Aryl polyolefins (C11-C50)	1979	NI	NI	0	NR	0	NI	0	0	0	0	0		NI	Fp	2
	131	RTECS No						CAS No:								
Aviation alkylates (C8 paraffins and iso-paraffins BPT 95 - 120°C)	286	(5)	NI	(5)	(R)	(4)	NI	0	0	(0)	(0)	(0)		NI	FE	2
	132	RTECS No						CAS No:								
Barium long chain (C11-C50) alkaryl sulphonate	1978	4	NI	4	NR	3	NI	2	0	(2)	0	0		NI	S	2
	2370	RTECS No						CAS No:			61790-48-5					
Benzene and mixtures having 10% benzene or more (i)	324	2	1	1	R	2	NI	1	0	0	2	2	CTM	NT	E	3
	133	RTECS No			CY1400000			CAS No:			71-43-2					
Benzene sulphonyl chloride	320	1	1	1	R	(1)	NI	1	(2)	(3)	3	3		NI	SD	3
	134	RTECS No			DB8750000			CAS No:			98-09-9					
Benzenetricarboxylic acid, trioctyl ester	1733	0	0	0	NR	0	NI	0	(0)	2	1	1		NI	Fp	2
	136	RTECS No						CAS No:								
Benzyl acetate	348	1	NI	1	R	3	1	1	0	2	1	1		NI	SD	2
	138	RTECS No			AF5075000			CAS No:			140-11-4					
Benzyl alcohol	349	1	NI	1	R	2	NI	1	1	2	2	2		NI	SD	2
	139	RTECS No			DN3150000			CAS No:			100-51-6					
Benzyl chloride	352	NI	1	1	R	3	1	1	(2)	3	2	3	CSA	NI	S	3
	140	RTECS No			XS8925000			CAS No:			100-44-7					
N,N-bis(2-hydroxyethyl) oleamide	2110	5	NI	5	NR	NI	NI	0	0	(2)	2	2		NI	Fp	2
	2201	RTECS No						CAS No:								
Borax	359	Inor	0	0	Inorg	1	0	0	0	(1)	1	1	R	NI	S	3
	143	RTECS No			VZ2275000			CAS No:			1303-96-4					
Boric acid	360	Inor	0	0	Inorg	1	0	0	(0)	(1)	1	1	R	NI	S	3
	2254	RTECS No			ED4550000			CAS No:			10043-35-3					
Brake fluid base mix: Poly(2-8)alkylene (C2-C3) glycols/Polyalkylene (C2-C10) glycols monoalkyl (C1-C4) ethers and their borate esters	2358	(1)	NI	(1)	(R)	(1)	(0)	0	0	0	2	2		NI	D	2
	144	RTECS No						CAS No:								

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3	
Brominated epoxy resin in acetone	3069	NI	NI		NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI	
		RTECS No			CAS No:												
Bromochloromethane	2084	1	1	1	NR	1	NI	0	0	0	1	0		NI	SD	1	
	145	RTECS No			PA5250000	CAS No:			74-97-5								
1-Bromopropane	2229	2	NI	2	NI	NI	NI	0	(0)	0	(2)	(2)		NI	SD	2	
	2696	RTECS No			CAS No:			106-94-5									
Butene oligomer	386	0	NI	0	NR	(4)	0	0	0	0	0	1		NI	FE	2	
	146	RTECS No			CAS No:			72317-18-1									
Butyl acetate (all isomers)	387	1	NI	1	R	2	NI	0	0	2	0	1		NI	FED	2	
	147	RTECS No			AF7350000	CAS No:			123-86-4								
Butyl acrylate (all isomers)	390	2	NI	2	R	3	NI	1	1	1	2	2	SA	NI	FED	2	
	148	RTECS No			UD3150000	CAS No:			141-32-2								
n-Butyl alcohol	381	0	(0)	0	R	0	NI	0	0	0	2	3		NT	D	3	
	474	RTECS No			EO1400000	CAS No:			71-36-3								
sec-Butyl alcohol	383	0	(0)	0	R	0	NI	0	0	0	0	2		NT	D	2	
	638	RTECS No			EO1750000	CAS No:			78-92-2								
tert-Butyl alcohol	384	0	0	0	NR	1	NI	0	0	0	1	3		NT	D	3	
	686	RTECS No			EO1925000	CAS No:			71-36-3								
Butylamine (all isomers)	392	0	NI	0	R	2	NI	2	2	3	3C	3		NI	DE	3	
	154	RTECS No			EO2975000	CAS No:			109-73-9								
Butylbenzene (all isomers)	1774	4	NI	4	NI	4	1	0	0	(2)	2	1		NI	Fp	2	
	155	RTECS No			CY9070000	CAS No:			104-51-8								
Butyl benzyl phthalate	398	4	4	4	R	4	2	0	0	(0)	(0)	(0)	R	NI	S	3	
	149	RTECS No			TH9990000	CAS No:			85-68-7								
Butyl butyrate (all isomers)	399	2	NI	2	NI	2	NI	0	0	(1)	1	NI		NI	FE	2	
	150	RTECS No			ES8120000	CAS No:			109-21-7								

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Butyl/Decyl/Cetyl/Eicosyl methacrylate mixture	2295	(5)	NI	(5)	(NR)	(3)	NI	0	0	0	2	2		NI	FE	2
	153	RTECS No						CAS No:			97-88-1					
Butylene glycol	402	0	NI	0	R	1	NI	1	0	0	0	0		NI	D	1
	156	RTECS No EK0525000						CAS No:			110-63-4					
1,2-Butylene oxide	403	0	NI	0	NR	2	NI	1	1	2	1	1	C	NI	DE	3
	8	RTECS No EK3675000						CAS No:			106-88-7					
n-Butyl ether	578	3	3	3	NR	2	NI	0	0	0	1	1		NI	FE	2
	475	RTECS No EK5425000						CAS No:			142-96-1					
Butyl methacrylate	409	2	NI	2	NR	1	NI	0	0	0	2	2	S	NI	FE	2
	151	RTECS No OZ3675000						CAS No:			97-88-1					
Butyl octyl phthalate	410	5	NI	5	(R)	0	2	0	0	(1)	1	1	R	NI	Fp	3
	2749	RTECS No						CAS No:			85-69-8					
n-Butyl propionate	1483	2	NI	2	R	2	NI	0	0	0	1	1		NI	FED	2
	476	RTECS No UE8245000						CAS No:			590-01-2					
Butyl stearate	413	0	NI	0	NI	0	NI	0	NI	NI	NI	NI		NI	Fp	2
	152	RTECS No WI2900000						CAS No:			123-95-5					
Butyraldehyde (all isomers)	416	1	NI	1	R	2	0	0	1	0	3	3		NI	DE	3
	157	RTECS No ES2275000						CAS No:			123-72-8					
Butyric acid	418	0	NI	0	R	2	0	0	1	0	3A	3		NI	D	3
	158	RTECS No ES5425000						CAS No:			107-92-6					
gamma-Butyrolactone	420	0	NI	0	R	(3)	NI	1	(0)	0	0	1	C	NI	D	3
	360	RTECS No LU3500000						CAS No:			96-48-0					
Calcium alkyl (C9) phenol sulphide/Polyolefin phosphorosulphide mixture	1435	NI	NI	NI	NR	4	NI	0	0	(0)	NI	NI		NI	NI	NI
	160	RTECS No						CAS No:								
Calcium carbonate slurry	2016	Inor	0	0	Inorg	1	NI	0	(0)	(2)	1	2		NI	S	2
	161	RTECS No FF9335000						CAS No:			471-34-1					

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Calcium hydroxide slurry	431	Inor	0	0	Inorg	1	NI	0	(0)	(2)	1	2		NI	S	2
	162	RTECS No			EW2800000	CAS No:						1305-62-0				
Calcium hypochlorite solution (15% or less)	2073	Inor	0	0	Inorg	(4)	NI	1	0	1	3A	3		NI	D	3
	163	RTECS No			NH3485000	CAS No:						7778-54-3				
Calcium hypochlorite solution (more than 15%)	432	Inor	0	0	Inorg	5	NI	1	0	1	3A	3		NI	D	3
	164	RTECS No			NH3485000	CAS No:						7778-54-3				
Calcium lignosulphonate solutions	2087	0	NI	0	NR	0	NI	0	(0)	(0)	0	0		NI	D	0
	165	RTECS No			CAS No:											
Calcium long-chain alkaryl sulphonate (C11-C50)	1973	NI	0	0	NR	0	NI	0	0	(1)	1	1	S	NI	FD	2
	169	RTECS No			CAS No:						61789-86-4					
Calcium long-chain alkyl(C5-C10) phenate	2106	0	NI	0	NR	2	NI	0	0	(0)	0	0		NI	FD	1
	168	RTECS No			CAS No:											
Calcium long-chain alkyl(C11-C40) phenate	2097	0	NI	0	NR	0	NI	0	0	(1)	1	1		NI	Fp	2
	167	RTECS No			CAS No:											
Calcium long-chain alkyl phenate sulphide (C8-C40)	1756	0	NI	0	NR	0	NI	0	0	(2)	(2)	(2)	S	NI	Fp	3
	170	RTECS No			CAS No:											
Calcium long-chain alkyl phenolic amine (C8-C40)	1728	NI	NI	NI	NR	0	NI	0	0	(1)	1	(1)		NI	Fp	2
	171	RTECS No			CAS No:											
Calcium long-chain alkyl salicylate (C13+)	70	0	NI	0	NR	2	NI	0	0	(1)	(1)	(1)	S	NI	Fp	3
	166	RTECS No			CAS No:						114959-46-5					
Calcium nitrate/Magnesium nitrate/Potassium chloride solution	1734	Inor	0	0	Inorg	1	0	0	(0)	(1)	(1)	1		NI	D	1
	173	RTECS No			CAS No:						10124-37-5					
Calcium nitrate solutions (50% or less)	1803	Inor	0	0	Inorg	0	NI	0	(0)	(1)	1	1		NI	D	1
	172	RTECS No			EW2985000	CAS No:						10124-37-5				
Camphor oil	1897	NI	NI	NI	NI	NI	NI	2	NI	(2)	1	NI		(T)	FE	2
	174	RTECS No			EX1490000	CAS No:						8008-51-3				

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
epsilon-Caprolactam (molten or aqueous solutions)	436	0	NI	0	R	1	0	1	1	4	1	2		NI	D	3
	310	RTECS No CM3675000						CAS No:			105-60-2					
Caramel solutions		NI	NI		NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI
	175	RTECS No						CAS No:								
Carbolic oil	437	(3)	3	(3)	(NR)	(3)	(1)	2	2	3	3	3	ATNCM	NI	FED	3
	176	RTECS No						CAS No:			88465-00-3					
Carbon disulphide	439	2	1	1	NR	3	NI	2	(3)	4	3A	2	RN	NI	SD	3
	177	RTECS No FF6650000						CAS No:			75-15-0					
Carbon tetrachloride	1296	2	2	2	NR	3	0	0	0	0	1	1	CT	NI	S	3
	178	RTECS No FG4900000						CAS No:			56-23-5					
Cashew nut shell oil (untreated)	443	0	NI	0	R	0	NI	(0)	(0)	(2)	2	(2)	S	NI	Fp	3
	179	RTECS No						CAS No:			8007-24-7					
Castor oil	2314	0	NI	0	R	(2)	NI	0	0	(1)	1	1	1	NI	Fp	2
	3044	RTECS No						CAS No:								
Castor oil (containing less than 2% free fatty acids)	442	0	NI	0	R	(2)	NI	0	0	(1)	1	1		NI	Fp	2
	2773	RTECS No FI4100000						CAS No:			8001-79-4					
Cetyl/Eicosyl methacrylate mixture	445	0	NI	0	(NR)	(0)	NI	0	(0)	(1)	(1)	(1)		NI	Fp	2
	180	RTECS No						CAS No:								
Chlorinated paraffins (C10-C13)	2021	5	5	5	NR	5	2	0	0	(1)	1	1	C	NI	S	3
	181	RTECS No						CAS No:			85535-84-8					
Chlorinated paraffins (C10-C13) (60% chlorine or less)	2020	5	5	5	NR	5	3	(0)	(0)	(1)	(1)	(1)	C	NI	S	3
	2832	RTECS No						CAS No:			85535-84-8					
Chlorinated paraffins (C14-C17) (with 50% chlorine or more, and less than 1% C13 or shorter chains)	2112	5	4	4	NR	6	3	0	0	(2)	2	2	C	NI	S	3
	182	RTECS No						CAS No:			85535-85-9					
Chlorinated paraffins (C18+) with any level of chlorine	2024	0	4	4	NR	0	2	0	0	(1)	(1)	(1)	C	NI	S	3
	183	RTECS No						CAS No:			63449-39-8					

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Chloroacetic acid (80% or less)	450	0	NI	0	R	2	0	2	3	(4)	3C	3	A	NI	D	3
	184	RTECS No AF8575000						CAS No:			79-11-8					
Chlorobenzene	456	2	2	2	NR	3	0	1	0	1	2	0	2	NI	S	2
	185	RTECS No CZ0175000						CAS No:			108-90-7					
Chloroform	1328	1	1	1	NR	2	0	2	0	2	1	1	CT	NI	SD	3
	186	RTECS No FS9100000						CAS No:			67-66-3					
Chlorohydrins (crude)	463	0	NI	0	R	0	NI	(2)	(2)	(3)	(3A)	3	CS	NI	D	3
	187	RTECS No TY4025000						CAS No:			96-24-2					
N-(3-Chloro-2-hydroxypropyl)trimethyl ammonium chloride solution (75% or less)	2286	0	0	0	NR	1	NI	0	0	(2)	0	(2)	SC	NI	D	3
	2579	RTECS No						CAS No:			3327-22-8					
4-Chloro-2-methylphenoxyacetic acid, dimethylamine salt solution	1536	2	NI	2	NI	2	NI	1	0	2	1	1	S	0	S	2
	62	RTECS No						CAS No:								
o-Chloronitrobenzene	467	2	2	2	NR	3	NI	2	2	2	1	1		NI	S	2
	533	RTECS No CZ0855000						CAS No:			25167-93-5					
1-(4-Chlorophenyl)-4,4- dimethyl-pentan-3-one	1772	3	3	3	NR	3	NI	0	0	(1)	1	0		NI	S	1
	21	RTECS No						CAS No:								
2- or 3-Chloropropionic acid	474	0	NI	0	R	1	NI	1	(3)	2	3A	3		NI	D	3
	36	RTECS No UE8570000						CAS No:			598-78-7					
Chlorosulphonic acid	479	Inor	0	0	Inorg	2	NI	1	0	2	1	1		NI	D	2
	188	RTECS No FX5730000						CAS No:			7790-94-5					
m-Chlorotoluene	481	3	NI	3	NR	2	NI	2	0	2	1	1		NI	S	2
	426	RTECS No XS8990000						CAS No:			108-41-8					
o-Chlorotoluene	480	3	3	3	NR	3	1	2	0	2	1	1		NI	S	2
	534	RTECS No XS9000000						CAS No:			95-49-8					
p-Chlorotoluene	482	3	3	3	NR	3	0	0	0	2	1	1		NI	S	2
	551	RTECS No XS9010000						CAS No:			106-43-4					

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Chlorotoluenes (mixed isomers)	480	3	3	3	NR	3	1	2	0	2	1	1		NI	S	2
	189	RTECS No XS9000000						CAS No:						95-49-8		
Choline chloride solutions	485	0	NI	0	R	1	NI	0	(0)	(0)	0	0		NI	D	0
	190	RTECS No KH2975000						CAS No:						67-48-1		
Citric acid (70% or less)	493	0	NI	0	R	1	0	0	(0)	(3)	1	3		NI	D	3
	748	RTECS No GE7350000						CAS No:						77-92-9		
Clay slurry	495	Inor	0	0	Inorg	0	0	0	0	0	0	0		NI	S	0
	191	RTECS No						CAS No:								
Coal slurry	498	Inor	0	0	Inorg	0	0	0	0	0	0	0		NI	S	0
	192	RTECS No						CAS No:								
Coal tar	499	(4)	4	4	NR	3	1	0	0	0	2	2	CMR	(T)	S	3
	193	RTECS No GF8600000						CAS No:						65996-93-2		
Coal tar naphtha solvent	500	3	NI	3	NR	3	NI	0	0	(1)	1	1	C	(T)	FE	3
	194	RTECS No DE3030000						CAS No:						8030-30-6		
Coal tar pitch (molten)	491	3	(3)	(3)	NR	4	2	0	0	(1)	1	0	CM	NI	S	3
	195	RTECS No GF8655000						CAS No:						65996-93-2		
Cobalt naphthenate in solvent naphtha	501	NI	NI	NI	NR	3	NI	0	(0)	(1)	NI	1	C	NI	FE/F	3
	196	RTECS No						CAS No:								
Cocoa butter	2342	0	NI	0	R	0	NI	(0)	(0)	(1)	(0)	(1)		NI	Fp	2
	3096	RTECS No						CAS No:						8002-31-1		
Coconut acid oil	2370	0	0	0	R	3	NI	(0)	(0)	(1)	(1)	(1)		NI	Fp	2
	3139	RTECS No						CAS No:								
Coconut fatty acid distillate	2366	0	NI	0	R	(3)	NI	0	(0)	(1)	(1)	(1)		NI	Fp	2
	3130	RTECS No						CAS No:						61788-47-4		
Coconut oil	503	0	NI	0	R	1	NI	0	(0)	(1)	0	1		NI	Fp	2
	2772	RTECS No GG6040000						CAS No:						8001-31-8		

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3	
Coconut oil fatty acid	505	4	0	0	(R)	0	NI	0	(0)	(1)	(1)	(1)		NI	Fp	2	
	197	RTECS No						CAS No:							61788-47-4		
Coconut oil fatty acid methyl ester	506	5	0	0	R	0	NI	(0)	(0)	(0)	(0)	(1)		NI	Fp	2	
	198	RTECS No						CAS No:							61788-59-8		
Copper salt of long chain (C17+) alkanolic acid	2111	0	NI	0	(R)	2	NI	0	0	(0)	0	0		NI	Fp	2	
	2214	RTECS No						CAS No:									
Corn Oil	521	0	NI	0	R	(2)	NI	0	(0)	(1)	1	1		NI	Fp	2	
	2781	RTECS No			GM4800000			CAS No:							8001-30-7		
Cotton seed oil	523	0	NI	0	R	(2)	NI	(0)	(0)	(1)	0	1		NI	Fp	2	
	2783	RTECS No			GN2815000			CAS No:							8001-29-4		
Creosote (wood)	525	NI	NI	NI	NR	5	NI	1	0	2	2	1	CM	(T)	SD	3	
	200	RTECS No			GO5870000			CAS No:							8021-39-4		
Cresols (all isomers)	527	2	2	2	R	3	0	2	2	(3)	3A	3		T	SD	3	
	201	RTECS No			GO5950000			CAS No:							1319-77-3		
Cresylic acid, dephenolized	1875	2	2	2	R	3	0	(2)	(2)	(3)	(3A)	(3)		(T)	S	3	
	202	RTECS No						CAS No:									
Cresylic acid, sodium salt solution	1914	(2)	(2)	(2)	(R)	(3)	(0)	1	(1)	(3)	3	3	TCM	(T)	D	3	
	203	RTECS No						CAS No:									
Crotonaldehyde	528	0	NI	0	NR	3	1	2	4	4	2	3		NI	D	3	
	204	RTECS No			GP9499000			CAS No:							4170-30-3		
Crude carbon tetrachloride		NI	NI		NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI	
	3070	RTECS No						CAS No:									
Crude Piperazine	2331	0	NI	0	R	2	NI	(1)	(2)	(3)	3	3	S	NI	D	3	
	2810	RTECS No						CAS No:									
1,5,9-Cyclododecatriene	534	5	5	5	NR	4	NI	0	0	2	2	2	SA	NI	F	3	
	17	RTECS No			GU2308000			CAS No:							4904-61-4		

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Cycloheptane	535 205	4	NI	4	(NR)	4	NI	(0)	0	(1)	(0)	(1)		NI	FE	2
			RTECS No			GU3140000		CAS No:								291-64-5
Cyclohexane	536 206	3	3	3	NR	3	NI	0	0	1	0	1		NI	E	2
			RTECS No			GU6300000		CAS No:								110-82-7
Cyclohexanol	537 207	1	NI	1	R	2	NI	0	0	0	2	2		NI	Fp	2
			RTECS No			GV7875000		CAS No:								108-93-0
Cyclohexanone	539 208	0	1	1	R	1	0	1	1	1	2	2		NI	FE	2
			RTECS No			GW1050000		CAS No:								108-93-0
Cyclohexanone, Cyclohexanol mixture	1436 209	1	1	1	R	2	NI	1	1	1	2	2		NI	FED	2
			RTECS No					CAS No:								
Cyclohexyl acetate	541 210	2	NI	2	(R)	(2)	NI	0	0	(2)	2	1		NI	FED	2
			RTECS No			AG5075000		CAS No:								622-45-7
Cyclohexylamine	542 211	1	NI	1	R	2	NI	2	2	3	3	3	S	NI	D	3
			RTECS No			GX0700000		CAS No:								108-91-8
1,3-Cyclopentadiene dimer (molten)	545 11	3	3	3	NR	3	NI	2	0	3	2	2		NI	Fp	2
			RTECS No			PC1050000		CAS No:								77-73-6
Cyclopentane	546 212	3	NI	3	NR	3	NI	(0)	(0)	0	1	(1)		NI	E	2
			RTECS No			GY2390000		CAS No:								287-92-3
Cyclopentene	547 213	2	NI	2	NI	3	NI	1	1	0	NI	NI		NI	E	2
			RTECS No			GY5950000		CAS No:								142-29-0
p-Cymene	549 552	4	4	4	(NR)	3	NI	0	(0)	1	2	(1)		NI	FE	2
			RTECS No			GZ5950000		CAS No:								99-87-6
Decahydronaphthalene	551 214	4	4	4	NR	3	NI	0	0	(1)	1	1		NI	F	1
			RTECS No			QJ3150000		CAS No:								91-17-8
Decane	554 2620	5	NI	5	R	0	0	0	0	0	1	0		NI	F	1
			RTECS No			HD6550000		CAS No:								124-18-5

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Decanoic acid	555 215	4	NI	4	R	4	1	0	0	(2)	2	2		NI	Fp	2
			RTECS No	HD9100000				CAS No:								334-48-5
Decene	558 216	5	NI	5	R	4	2	0	0	0	2	0	A	NI	F	3
			RTECS No					CAS No:								25339-53-1
Decyl acetate	1767 217	4	NI	4	NI	NI	NI	0	0	(1)	(1)	(1)		NI	F	1
			RTECS No					CAS No:								112-17-4
Decyl acrylate	559 218	5	NI	5	NI	5	NI	0	0	(2)	2	1		NI	Fp	2
			RTECS No	AS7400000				CAS No:								2156-96-9
Decyl alcohol (all isomers)	557 219	3	2	2	R	3	NI	0	0	0	2	1		NI	Fp	2
			RTECS No	NR0960000				CAS No:								25339-17-7
Decyloxytetrahydrothiophene dioxide	1859 220	3	NI	3	NR	4	NI	0	0	(1)	1	0		NI	Fp	2
			RTECS No					CAS No:								18760-44-6
Diacetone alcohol	563 226	0	NI	0	R	1	0	0	0	(2)	2	2		NI	D	2
			RTECS No	SA9100000				CAS No:								123-42-2
Dialkyl (C8-C9) diphenylamines	1852 2255	5	NI	5	NR	1	0	0	0	(0)	0	0		NI	FD	0
			RTECS No					CAS No:								
Dialkyl (C7-C13) phthalates	566 227	0	4	4	(NR)	0	2	0	0	(1)	1	1	R	NI	Fp	3
			RTECS No					CAS No:								
Dialkyl (C9 - C10) Phthalates	2359 3121	(0)	(0)	(0)	(R)	(0)	(0)	0	0	(1)	0	1		NI	Fp	2
			RTECS No					CAS No:								
Dibromomethane	574 228	1	NI	1	NR	(2)	NI	1	0	0	NI	NI		NI	SD	1
			RTECS No	PA7350000				CAS No:								74-95-3
Dibutylamine	577 231	2	NI	2	R	3	NI	2	2	3	3	3		NI	FD	3
			RTECS No	HR7780000				CAS No:								110-96-3
Dibutyl hydrogen phosphate	1857 229	1	NI	1	NI	2	NI	0	0	(3)	3	3		NI	F	3
			RTECS No					CAS No:								1809-19-4

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
2,6-Di-tert-butylphenol	2082	4	NI	4	NR	4	NI	0	0	(1)	1	1		NI	Fp	2
	2250	RTECS No SK8265000			CAS No:			128-39-2								
Dibutyl phthalate	582	4	4	4	R	4	1	0	0	1	0	1	R	NI	S	3
	230	RTECS No TI0875000			CAS No:			84-74-2								
Dichlorobenzene (all isomers)	333	3	4	4	NR	3	1	1	0	1	(2)	2	CMR	T	S	3
	232	RTECS No			CAS No:			541-73-1								
3,4-Dichloro-1-butene	2079	2	2	2	NR	3	NI	1	0	2	2	3		NI	S	3
	56	RTECS No EM4740000			CAS No:			760-23-6								
1,1-Dichloroethane	590	1	NI	1	NR	1	NI	1	(1)	0	2	2		NI	SD	2
	4	RTECS No KI0175000			CAS No:			75-34-3								
Dichloroethyl ether	588	1	1	1	NR	1	0	2	3	4	1	3	M	T	SD	3
	233	RTECS No KN0875000			CAS No:			111-44-4								
1,6-Dichlorohexane	593	3	NI	3	NR	3	NI	0	(0)	(0)	0	0		NI	S	0
	19	RTECS No			CAS No:			2163-00-0								
2,2'-Dichloroisopropyl ether	615	2	2	2	NR	2	NI	2	0	2	0	2		NI	SD	2
	25	RTECS No KN1750000			CAS No:			108-60-1								
Dichloromethane	594	1	2	2	NR	1	0	1	0	0	2	2	C	NI	SD	3
	234	RTECS No PA8050000			CAS No:			75-09-2								
2,4-Dichlorophenol	596	3	2	2	R	3	2	3	2	3	3	3		T	S	3
	30	RTECS No SK8575000			CAS No:			120-83-2								
2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution	599	0	1	1	R	3	NI	1	0	(3)	1	3		(T)	D	3
	32	RTECS No			CAS No:											
2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution (70% or less)	600	0	1	1	R	3	NI	1	0	(3)	1	3		(T)	D	3
	33	RTECS No			CAS No:											
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution	602	0	NI	0	R	2	NI	1	0	(3)	(1)	3		(T)	D	3
	34	RTECS No			CAS No:			2569-10-9								

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Diethylene glycol dibutyl ether	629	2	NI	2	NI	1	NI	0	0	(1)	1	1		NI	FD	1
	244	RTECS No KN0350000						CAS No:			112-73-2					
Diethylene glycol diethyl ether	630	0	NI	0	NR	0	NI	1	0	(2)	(2)	2		NI	D	2
	245	RTECS No KN3160000						CAS No:			112-36-7					
Diethylene glycol phthalate	1438	2	NI	2	NR	1	NI	0	0	(2)	(1)	2		NI	S	2
	247	RTECS No						CAS No:								
Diethylenetriamine	638	0	1	1	(R)	2	NI	1	3	3	3A	3	S	NI	FD	3
	248	RTECS No IE1225000						CAS No:			111-40-0					
Diethylenetriaminepentaacetic acid, pentasodium salt solution	2076	0	NI	0	NR	0	NI	0	(0)	(0)	0	0		NI	D	0
	249	RTECS No						CAS No:			140-01-2					
Diethyl ether	640	0	1	1	NR	0	NI	1	0	0	1	1		NI	DE	2
	237	RTECS No KI5775000						CAS No:			60-29-7					
Di-(2-ethylhexyl) adipate	641	0	2	2	R	4	2	0	0	0	1	1	R	NI	Fp	3
	222	RTECS No AU9700000						CAS No:			103-23-1					
Di-(2-ethylhexyl) phosphoric acid	643	(2)	1	1	NR	2	NI	0	1	(2)	2	2		NI	Fp	2
	223	RTECS No TB7875000						CAS No:			298-07-7					
Di-(2-ethylhexyl) phthalate	642	0	4	4	NR	0	0	0	0	1	1	1	R	NI	Fp	3
	2751	RTECS No TI0350000						CAS No:			117-81-7					
Diethyl phthalate	648	3	3	3	R	2	0	1	0	(2)	1	1		NI	S	2
	238	RTECS No TI1050000						CAS No:			84-66-2					
Diethyl sulphate	649	1	NI	1	(NR)	(2)	NI	1	2	3	2	3	CM	NI	SD	3
	239	RTECS No WS7875000						CAS No:			64-67-5					
Diglycidyl ether of bisphenol A	653	3	NI	3	NR	4	NI	0	0	(2)	1	2	S	NI	S	2
	250	RTECS No TX3800000						CAS No:			1675-54-3					
Diglycidyl ether of bisphenol F	728	0	NI	0	NR	3	NI	0	(0)	(2)	1	(2)	SR	NI	S	3
	251	RTECS No						CAS No:			55492-52-9					

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Diheptyl phthalate	655 252	0	2	2	R	0	NI	0	0	(1)	1	1	R	NI	Fp	3
			RTECS No	TI1090000				CAS No:								3648-21-3
Di-n-hexyl adipate	656 224	5	NI	5	(NR)	5	0	0	0	(1)	0	1		NI	FE	1
			RTECS No	AV1150000				CAS No:								110-33-8
Dihexyl phthalate	2125 253	5	NI	5	R	0	2	0	0	(1)	1	1	R	NI	Fp	3
			RTECS No	TI1100000				CAS No:								84-75-3
1,4-Dihydro-9,10-dihydroxyanthracene, disodium salt solution	657 15	1	NI	1	NI	1	NI	0	NI	NI	NI	NI		NI	D	NI
			RTECS No					CAS No:								
Diisobutylamine	576 256	2	NI	2	R	3	NI	2	(2)	2	(3)	(3)		NI	FED	3
			RTECS No	TX1750000				CAS No:								110-96-3
Diisobutylene	575 257	4	4	4	NR	3	NI	0	0	0	1	0		NI	FE	2
			RTECS No	SB2715000				CAS No:								25167-70-8
Diisobutyl ketone	579 254	3	NI	3	R	2	NI	0	0	2	2	2		NI	F	2
			RTECS No	MJ5775000				CAS No:								108-83-8
Diisobutyl phthalate	581 255	4	(4)	4	R	4	1	0	0	(0)	0	0	R	NI	S	3
			RTECS No	TI1225000				CAS No:								84-69-5
Diisodecyl phthalate	619 3119	0	0	0	(R)	0	NI	0	0	(0)	0	1		NI	Fp	2
			RTECS No	TI1270000				CAS No:								26761-40-0
Diisononyl adipate	690 258	0	NI	0	R	0	0	0	0	(1)	1	1		NI	Fp	2
			RTECS No					CAS No:								33703-08-1
Diisononyl phthalate	691 3120	0	0	0	R	0	0	0	0	(0)	0	0		NI	Fp	2
			RTECS No					CAS No:								
Diisooctyl phthalate	693 259	0	4	4	(NR)	0	0	0	0	(1)	1	0		NI	Fp	2
			RTECS No	TI1300000				CAS No:								27554-26-3
Diisopropanolamine	703 260	0	NI	0	NR	1	NI	0	0	0	2	3		NI	FD	3
			RTECS No	UB6600000				CAS No:								110-97-4

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3	
Diisopropylamine	705	1	NI	1	NR	2	0	1	1	2	3	3		NI	ED	3	
	261	RTECS No IM4025000			CAS No:			108-18-9									
Diisopropylbenzene (all isomers)	2220	5	4	4	NR	4	NI	0	0	2	2	1		(T)	F	2	
	262	RTECS No			CAS No:			25321-09-9									
1,3-Diisopropyl benzene	706	5	4	4	NR	4	NI	0	0	2	2	1		NI	F	2	
	2626	RTECS No CZ6330000			CAS No:												
Diisopropyl naphthalene	712	5	4	4	NR	(3)	NI	0	0	(1)	1	1		NI	Fp	2	
	263	RTECS No QJ1527000			CAS No:			38640-62-9									
N,N-Dimethylacetamide	658	0	NI	0	R	1	NI	0	0	2	1	2		NI	D	2	
	2730	RTECS No AB7700000			CAS No:			127-19-5									
N,N-Dimethylacetamide solution (40% or less)	658	0	NI	0	R	1	NI	0	0	2	1	2		NI	D	2	
	466	RTECS No AB7700000			CAS No:			127-19-5									
Dimethyl adipate	659	1	NI	1	NR	4	NI	0	0	2	1	1		NI	SD	2	
	264	RTECS No AV1645000			CAS No:			627-93-0									
Dimethylamine (anhydrous)	660	NI	NI		NI	NI	NI	2	0	2	3B	3	S	NT	GD	3	
	2628	RTECS No IP8750000			CAS No:			124-40-3									
Dimethylamine solution (45% or less)	661	0	NI	0	R	3	0	2	0	2	3B	3	S	NT	DE	3	
	270	RTECS No IP8750000			CAS No:			124-40-3									
Dimethylamine solution (greater than 45% but not greater than 55%)	661	0	NI	0	R	3	0	2	0	2	3B	3	S	NT	DE	3	
	271	RTECS No IP8750000			CAS No:			124-40-3									
Dimethylamine solution (greater than 55% but not greater than 65%)	661	0	NI	0	R	3	0	2	0	2	3B	3	S	NT	DE	3	
	272	RTECS No IP8750000			CAS No:			124-40-3									
N,N-Dimethylcyclohexylamine	665	2	NI	2	NR	2	NI	1	2	3	3C	3		NI	FD	3	
	467	RTECS No GX1198000			CAS No:			98-94-2									
Dimethyl disulphide	1616	1	NI	1	NR	3	2	2	0	2	1	1		NI	SD	2	
	2504	RTECS No JO1927500			CAS No:			624-92-0									

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
N,N-Dimethyldodecylamine	2126 468	5	NI	5	R	4	NI	1	(1)	(3)	3	3		NI	F	3
			RTECS No			JR6600000		CAS No:								112-18-5
Dimethylethanolamine	667 273	0	NI	0	R	2	NI	1	1	2	3	3		NI	D	3
			RTECS No			KK6125000		CAS No:								108-01-0
Dimethylformamide	676 274	0	0	0	R	1	0	0	1	2	1	2	R	NI	D	3
			RTECS No			LQ2100000		CAS No:								68-12-2
Dimethyl glutarate	670 265	0	NI	0	R	3	NI	0	0	2	3	2	A	NI	SD	3
			RTECS No					CAS No:								1119-40-0
Dimethyl hydrogen phosphite	673 266	0	NI	0	NR	2	NI	1	0	0	1	1		NI	D	1
			RTECS No			SZ7710000		CAS No:								868-85-9
Dimethyl octanoic acid	675 267	3	NI	3	R	4	1	0	0	(2)	2	2		NI	Fp	2
			RTECS No					CAS No:								29662-90-6
Dimethyl phthalate	678 268	2	2	2	R	2	0	0	0	(1)	0	1	R	NI	SD	3
			RTECS No			TI1575000		CAS No:								131-11-3
Dimethylpolysiloxane	1161 275	NI	4	4	NI	2	NI	0	(0)	(0)	0	0		NI	F	1
			RTECS No					CAS No:								
2,2-Dimethylpropane-1,3-diol (molten or solution)	679 29	0	0	0	NR	0	0	0	0	0	2	2		NI	FD	2
			RTECS No			TY5775000		CAS No:								126-30-7
Dimethyl succinate	681 269	0	NI	0	NI	2	NI	0	0	0	0	2		NI	SD	2
			RTECS No			WM7675000		CAS No:								106-65-0
Dinitrotoluene (molten)	688 276	2	2	2	NR	4	2	2	(2)	(2)	1	0	CMR	NI	S	3
			RTECS No			XT1300000		CAS No:								25321-14-6
Dinonyl phthalate	689 2993	0	NI	0	R	0	O	0	0	(1)	1	1	R	0	Fp	3
			RTECS No			TI1800000		CAS No:								28553-12-0
Diocetyl phthalate	692 277	0	(4)	(4)	(NR)	0	0	0	0	(1)	1	(1)	R	NI	Fp	3
			RTECS No			TI1925000		CAS No:								117-84-0

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3	
1,4-Dioxane	682 16	0	0	0	NR	0	0	0	0	0	0	2	C	NI	D	3	
		RTECS No JG8225000			CAS No:			123-91-1									
Dipentene	686 278	4	NI	4	NR	2	NI	0	0	(2)	2	2	S	NI	F	3	
		RTECS No OS8100000			CAS No:			138-86-3									
Diphenyl	694 279	3	4	4	R	4	1	0	0	(2)	2	1		NI	S	2	
		RTECS No DU8050000			CAS No:			92-52-4									
Diphenylamine (molten)	2186 285	3	3	3	NR	3	1	0	0	(1)	1	1		NI	S	1	
		RTECS No			CAS No:			122-39-4									
Diphenylamine, reaction product with 2,2,4-Trimethylpentene	1500 286	NI	1	1	NR	3	NI	0	0	(1)	1	1	S	NI	Fp	3	
		RTECS No			CAS No:			68411-46-1									
Diphenylamines, alkylated	1770 287	5	NI	5	NR	(3)	NI	0	0	(1)	(1)	(1)	S	NI	F	3	
		RTECS No			CAS No:			68921-45-9									
Diphenyl/Diphenyl ether mixtures	698 283	NI	NI	4	NR	4	1	0	0	(1)	1	1		(T)	S	1	
		RTECS No DV1500000			CAS No:			8004-13-5									
1,1-Diphenylethane, Ethylenated benzene by-products	2945	NI	NI		NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI	
		RTECS No			CAS No:												
Diphenyl ether	699 281	4	4	4	NR	4	NI	0	0	0	1	1		T	S	1	
		RTECS No KN8970000			CAS No:			101-84-8									
Diphenyl ether/Diphenyl phenyl ether mixture	702 282	5	NI	5	NR	4	NI	0	0	0	1	1		(T)	S	1	
		RTECS No			CAS No:												
Diphenylmethane diisocyanate	700 288	5	2	2	NR	0	0	0	0	4	2	2	S	NI	S	3	
		RTECS No NQ9350000			CAS No:			101-68-8									
Diphenylol propane	2289 289	4	NI	4	NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI	
		RTECS No			CAS No:												
Diphenylol propane-epichlorohydrin resins	2237 290	3	NI	3	NR	4	NI	0	0	(2)	1	2		NI	S	2	
		RTECS No			CAS No:			1675-54-3									

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Di-n-propylamine	704	1	NI	1	NR	3	NI	2	2	2	3C	3		NI	FED	3
	225	RTECS No JL9200000						CAS No:						142-84-7		
Dipropylene glycol	707	0	1	1	NR	0	NI	0	0	0	1	1		NI	D	1
	291	RTECS No UB8785000						CAS No:						110-98-5		
Di-n-propyl phthalate	713	3	NI	3	(R)	3	NI	0	0	(1)	1	1	R	NI	S	3
	2752	RTECS No TI1940000						CAS No:						131-16-8		
Distilled resin oil	2299	(3)	NI	(3)	(NR)	(3)	NI	0	0	(2)	2	1	MN	NI	FE	3
	2958	RTECS No						CAS No:						68477-54-3		
Dithiocarbamate ester (C7-C35)	2185	NI	2	2	NR	4	NI	0	0	(1)	1	1		NI	S	1
	2371	RTECS No						CAS No:								
Ditridecyl adipate	2351	0	NI	0	NR	0	NI	0	0	(2)	2	1	S	NI	Fp	2
	293	RTECS No						CAS No:								
Ditridecyl phthalate	714	0	2	2	NR	0	(0)	0	0	(1)	1	(1)		0	Fp	2
	2994	RTECS No TI1950000						CAS No:						119-06-2		
Diundecyl phthalate	715	0	NI	0	NR	0	0	0	0	(1)	1	1		NI	Fp	3
	294	RTECS No TI1980000						CAS No:						3648-20-2		
Dodecane (all isomers)	718	5	NI	5	(R)	0	NI	0	0	(1)	(1)	(0)		NI	Fp	2
	295	RTECS No JR2125000						CAS No:						112-40-3		
tert-Dodecanethiol	2233	5	NI	5	NR	4	NI	0	0	(2)	2	1	S	NI	F	3
	2418	RTECS No						CAS No:						25103-58-6		
Dodecene (all isomers)	720	5	NI	5	NR	4	NI	0	0	(2)	2	1	A	NI	F	3
	296	RTECS No UD1950000						CAS No:						6842-15-5		
Dodecenylsuccinic acid, dipotassium salt solution	727	4	NI	4	NR	1	NI	(0)	(0)	NI	NI	NI		NI	D	NI
	297	RTECS No						CAS No:						57195-28-5		
Dodecyl alcohol	719	5	2	2	R	4	1	0	0	(1)	1	(1)		NI	Fp	2
	298	RTECS No JR5775000						CAS No:						112-53-8		

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Dodecylamine/Tetradecylamine mixture	721 303	3	NI	3	R	4	NI	1	0	(3)	3	3		NI	F	3
			RTECS No					CAS No:								
Dodecylbenzene	126 304	0	NI	0	NR	0	3	0	0	(2)	(2)	(1)		NI	F	2
			RTECS No		CZ9540000			CAS No:								123-01-3
Dodecyl diphenyl ether disulphonate solution	723 299	(5)	NI	5	NR	4	1	1	0	(3)	1	3		NI	D	3
			RTECS No		JR8050000			CAS No:								119345-04-9
Dodecyl hydroxypropyl sulphide	1861 2252	5	NI	5	NI	4	NI	0	0	(0)	0	0		NI	FD	0
			RTECS No					CAS No:								
Dodecyl methacrylate	893 300	5	NI	5	NR	0	NI	0	(0)	(1)	1	1		NI	F	1
			RTECS No		OZ4300000			CAS No:								142-90-5
Dodecyl/Octadecyl methacrylate (mixture)	2116 1717	(5)	NI	(5)	(NR)	(0)	NI	0	0	(1)	1	(1)		NI	Fp	2
			RTECS No					CAS No:								
Dodecyl/Pentadecyl methacrylate mixture	724 302	(5)	NI	(5)	(NR)	(0)	NI	0	(0)	(1)	(1)	(1)		NI	Fp	2
			RTECS No					CAS No:								
Dodecyl phenol	725 301	0	4	4	NI	4	NI	0	0	(3)	3	2		NI	Fp	3
			RTECS No		SL3675000			CAS No:								27193-86-8
Dodecyl Xylene	1763 306	0	NI	0	NI	0	NI	0	0	(1)	1	1		NI	Fp	2
			RTECS No					CAS No:								
Drilling brines (containing zinc salts)	1425 307	Inor	4	4	Inorg	4	1	(1)	(1)	(3)	(3)	(3)		NI	D	3
			RTECS No		ZH1400000			CAS No:								7646-85-7
Drilling brines, including:calcium bromide solution, calcium chloride solution and sodium chloride solution	427 308	Inor	0	0	Inorg	1	0	(0)	(0)	(2)	(1)	(2)		NI	D	2
			RTECS No		EV9328000			CAS No:								7789-41-5
Epichlorohydrin	731 309	0	NI	0	R	3	1	2	2	3	3a	3	CS	NI	D	3
			RTECS No		TX4900000			CAS No:								106-89-8
Ethanolamine	733 311	0	NI	0	R	2	0	1	1	3	3a	3		NI	D	3
			RTECS No		KJ5775000			CAS No:								141-45-5

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3	
2-Ethoxyethyl acetate	767 41	0	NI	0	R	2	0	1	0	1	1	2	R	NI	D	3	
			RTECS No													KK8225000	
																	CAS No:
																	111-15-9
Ethoxylated long chain (C16+) alkyloxyalkylamine	2103 2203	5	NI	5	NR	1	NI	0	0	(3)	3	(3)		NI	Fp	3	
			RTECS No														CAS No:
Ethoxylated tallow amine, glycol mixture	2252 2476	2	NI	2	NR	6	NI	1	0	3	2	3	S	NI	D	3	
			RTECS No														CAS No:
Ethyl acetate	735 312	0	2	2	R	1	0	0	0	1	0	1		NI	DE	2	
			RTECS No														AH5425000
																	CAS No:
																	141-78-6
Ethyl acetoacetate	736 313	0	0	0	R	1	NI	0	0	(1)	1	1		NI	D	1	
			RTECS No														AK5250000
																	CAS No:
																	141-97-9
Ethyl acrylate	734 314	1	NI	1	R	3	1	1	2	2	2	2	SC	T	ED	3	
			RTECS No														AT0700000
																	CAS No:
																	140-88-5
Ethyl alcohol	732 315	0	NI	0	R	0	NI	0	0	0	1	2		NI	D	2	
			RTECS No														KQ6300000
																	CAS No:
																	64-17-5
Ethylamine	1016 322	0	NI	0	R	2	NI	2	2	1	3	3		NI	GD	3	
			RTECS No														KH2100000
																	CAS No:
																	75-04-7
Ethylamine solutions (72% or less)	2219 323	NI	NI	0	R	2	NI	2	2	1	3	3		NI	DE	3	
			RTECS No														
																	CAS No:
																	75-04-7
Ethyl amyl ketone	1784 316	2	NI	2	NI	2	NI	0	0	(2)	2	NI		NI	FD	2	
			RTECS No														RH1485000
																	CAS No:
																	106-68-3
Ethylbenzene	740 324	3	2	2	R	3	1	0	0	0	2	2	C	NI	FE	3	
			RTECS No														DA0700000
																	CAS No:
																	100-41-4
N-Ethylbutylamine	745 477	1	NI	1	NI	NI	NI	1	1	2	3	3		NI	FED	3	
			RTECS No														EO4880000
																	CAS No:
																	13360-63-9
Ethyl tert-butyl ether	2085 320	1	NI	1	NI	2	NI	0	0	2	2	2		NI	E	2	
			RTECS No														KN4730200
																	CAS No:
																	637-92-3

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Ethyl butyrate	748	1	NI	1	NI	2	NI	0	0	(2)	2	NI		NI	FED	2
	317	RTECS No ET1660000						CAS No:			105-54-4					
Ethylcyclohexane	751	4	4	4	NR	3	NI	(0)	(0)	(1)	(0)	(1)		NI	FE	2
	325	RTECS No GV1140000						CAS No:			1678-91-7					
N-Ethylcyclohexylamine	752	2	NI	2	NI	(3)	NI	1	2	2	3	3		NI	FED	3
	478	RTECS No GX1225000						CAS No:			5459-93-8					
S-Ethyl dipropylthiocarbamate	2081	3	2	2	NI	3	NI	1	1	2	2	(2)	N	NI	F	3
	2302	RTECS No						CAS No:			759-94-4					
Ethylene carbonate	755	0	NI	0	R	0	NI	0	0	(2)	1	2		NI	SD	2
	326	RTECS No FF9550000						CAS No:			96-49-1					
Ethylene chlorohydrin	756	0	0	0	R	3	NI	2	3	4	2	3		NI	D	3
	327	RTECS No KK0875000						CAS No:			107-07-3					
Ethylene cyanohydrin	757	0	0	0	NI	2	NI	1	0	(2)	1	2		NI	D	2
	328	RTECS No MU5250000						CAS No:			109-78-4					
Ethylenediamine	758	0	1	1	R	3	1	1	2	1	3	3	S	NI	D	3
	343	RTECS No KH8575000						CAS No:			107-15-3					
Ethylenediaminetetraacetic acid, tetrasodium salt solution	759	0	NI	0	NR	2	0	1	(1)	(2)	1	2		NI	D	2
	344	RTECS No AH4375000						CAS No:			139-33-3					
Ethylene dibromide	760	1	2	2	NR	3	NI	2	2	2	3	3	CRT	NI	SD	3
	329	RTECS No KH9275000						CAS No:			106-93-4					
Ethylene dichloride	591	1	1	1	NR	2	0	1	0	2	1	2	C	NI	SD	3
	330	RTECS No KI0525000						CAS No:			107-06-2					
Ethylene glycol	761	0	NI	0	R	0	0	1	(1)	(1)	0	0	R	NI	D	3
	331	RTECS No KW2975000						CAS No:			107-21-1					
Ethylene glycol acetate	762	0	NI	0	R	2	NI	0	0	(3)	NI	(3)	R	NI	D	3
	333	RTECS No KW7175000						CAS No:			542-59-6					

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Ethylene glycol butyl ether acetate	764	1	NI	1	R	2	NI	0	1	(1)	1	1		NI	FD	1
	334	RTECS No KJ8925000						CAS No:			112-07-2					
Ethylene glycol diacetate	765	0	NI	0	NI	2	NI	0	0	(1)	1	NI		NI	D	1
	335	RTECS No KW4025000						CAS No:			111-55-7					
Ethylene glycol methyl butyl ether	772	1	NI	1	NI	1	NI	NI	NI	NI	NI	NI		NI	D	NI
	336	RTECS No						CAS No:			13343-98-1					
Ethylene glycol methyl ether acetate	773	0	NI	0	R	2	NI	1	0	(2)	NI	1	R	NI	D	3
	337	RTECS No KL5950000						CAS No:			110-49-6					
Ethylene glycol monoalkyl ethers	2268	0	NI	0	R	2	NI	1	2	2	1	2		NI	D	2
	338	RTECS No						CAS No:			111-76-2					
Ethylene glycol phenyl ether	775	1	NI	1	R	1	0	1	0	(2)	1	2		NI	SD	2
	339	RTECS No KM0350000						CAS No:			122-99-6					
Ethylene glycol phenyl ether/Diethylene glycol phenyl ether mixture	1740	NI	NI	1	R	1	NI	1	0	(2)	(2)	(2)		NI	SD	2
	340	RTECS No						CAS No:								
Ethylene oxide	77	NI	NI		NI	NI	NI	1	(1)	3	3	3	CMRS	NI	GD	3
	2744	RTECS No KX2450000						CAS No:								
Ethylene oxide/Propylene oxide mixture with an ethylene oxide content of not more than 30% by mass	78	0	NI	0	R	1	NI	1	1	3	3	3	CMR	NI	DE	3
	341	RTECS No						CAS No:								
Ethylene-Vinyl acetate copolymer (emulsion)	779	0	1	1	NR	0	0	0	(0)	(2)	2	0		NI	S	NI
	342	RTECS No						CAS No:								
Ethyl-3-ethoxypropionate	1439	1	NI	1	NR	2	NI	0	0	2	1	1		NI	FD	2
	321	RTECS No UF3325000						CAS No:			763-69-9					
2-Ethylhexanoic acid	776	2	NI	2	R	2	NI	0	0	(2)	2	2	R	NI	FD	3
	45	RTECS No MO7700000						CAS No:			149-57-5					
2-Ethylhexyl acrylate	782	3	NI	3	R	2	NI	0	0	(2)	2	2	S	NI	F	3
	46	RTECS No AT0855000						CAS No:			103-11-7					

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
2-Ethylhexylamine	1081 48	2	NI	2	NI	3	NI	1	1	3	3	3		NI	FD	3
			RTECS No			MQ5250000		CAS No:								104-75-6
2-Ethyl-2-(hydroxymethyl) propane-1,3-diol (C8-C10) ester	2054 42	0	NI	0	R	0	NI	0	(0)	(0)	0	(0)		NI	Fp	2
			RTECS No					CAS No:								
Ethylidene norbornene	783 345	3	3	3	NR	3	0	0	0	2	1	2		NI	FE	2
			RTECS No			RB9450000		CAS No:								16219-75-3
Ethyl isoamyl ketone	737 2618	NI	NI		NI	NI	NI	0	0	(1)	1	(2)		NI	FD	2
			RTECS No			MJ7350000		CAS No:								
Ethyl methacrylate	785 318	1	NI	1	R	2	NI	0	0	0	(2)	(2)	S	NI	FE	2
			RTECS No			OZ4550000		CAS No:								97-63-2
N-Ethylmethylallylamine	2228 2417	0	NI	0	NR	2	NI	3	2	2	3A	3		NI	D	3
			RTECS No					CAS No:								18328-90-0
o-Ethylphenol	788 535	2	NI	2	NI	(2)	NI	1	NI	NI	NI	NI		NI	S	NI
			RTECS No			SL4025000		CAS No:								90-00-6
Ethyl propionate	790 319	1	NI	1	NI	2	NI	0	(1)	(2)	2	2		NI	ED	2
			RTECS No			UF3675000		CAS No:								105-37-3
2-Ethyl-3-propylacrolein	791 43	2	NI	2	R	3	NI	0	0	1	3	3		NI	FE	3
			RTECS No			MP6300000		CAS No:								645-62-5
Ethyl toluene	2297 346	3	NI	3	NI	(3)	NI	0	0	0	2	2		NI	F	2
			RTECS No					CAS No:								622-96-8
Fatty acid (saturated C13+)	1298 347	5	NI	0	R	0	NI	0	(0)	(1)	(1)	(1)		NI	Fp	2
			RTECS No			QH4375000		CAS No:								544-63-8
Fatty acid methyl esters	2362 3125	0	NI	0	R	2	NI	0	(0)	(2)	2	2		NI	Fp	2
			RTECS No					CAS No:								
Fatty acids, 12+	2261 2780	5	0	0	(R)	0	NI	(0)	(0)	(2)	(1)	(2)		NI	NI	2
			RTECS No					CAS No:								

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Fatty acids, C8-C10	2324 3079	0	NI	0	R	4	NI	0	0	(3)	3C	3		NI	NI	NI
			RTECS No					CAS No:								68937-75-7
Fatty acids, C8-C18	2260 2779	(4)	NI	(4)	R	(4)	(1)	(0)	(0)	(1)	(1)	(1)		NI	Fp	3
			RTECS No					CAS No:								
Fatty acids, essentially linear,C6-C18, 2-ethylhexyl ester.	2253 1914	0	NI	0	R	1	NI	0	0	(1)	1	0		NI	Fp	2
			RTECS No					CAS No:								
Fatty acids, unsaturated, linear, C16+	2259 2778	0	0	0	R	(0)	NI	0	0	(0)	0	0		NI	Fp	2
			RTECS No					CAS No:								
Fatty alcohols, C8-C10	2325 3080	NI	NI		NI	NI	NI	(0)	(0)	(2)	(2)	(2)		NI	NI	NI
			RTECS No					CAS No:								
Ferric chloride solutions	339 348	Inor	5	5	Inorg	2	0	1	(0)	(3)	2	3		NI	D	3
			RTECS No			LJ9100000		CAS No:								7705-08-0
Ferric hydroxyethylethylenediaminetriacetic acid, trisodium salt solution	796 349	NI	NI	NI	NI	NI	NI	0	0	(1)	(0)	1		NI	D	1
			RTECS No					CAS No:								
Ferric nitrate/Nitric acid solution	337 350	Inor	5	5	Inorg	2	0	0	(0)	(3)	3	3		NI	D	3
			RTECS No					CAS No:								
Fish oil	2316 3046	0	NI	0	R	2	NI	(0)	(0)	(1)	(0)	(1)		NI	Fp	2
			RTECS No					CAS No:								
Fish oil (containing less than 4% free fatty acids)	801 2774	0	NI	0	R	2	NI	(0)	(0)	(1)	(0)	(1)		NI	Fp	2
			RTECS No			LK5150000		CAS No:								8016-13-5
Fish solubles (water-based fish meal extract)	1509 351	NI	NI	NI	NI	NI	NI	(0)	(0)	(0)	(0)	(0)		NI	NI	0
			RTECS No					CAS No:								
Fluorosilicic acid	806 2716	Inor	0	0	Inorg	2	NI	2	(2)	4	3	3		NI	D	3
			RTECS No			VV8225000		CAS No:								
Fluorosilicic acid (20-30%) in water solution	2240 353	Inor	0	0	Inorg	2	NI	(1)	(1)	4	3	3		NI	D	3
			RTECS No					CAS No:								16961-83-4

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Formaldehyde solutions (45% or less)	807	0	NI	0	R	2	NI	2	2	3	3	3	CSM	NT	D	3
	354	RTECS No LP8925000					CAS No:					50-00-0				
Formamide	808	0	NI	0	NR	1	NI	0	0	1	1	2	R	NI	D	3
	355	RTECS No LQ0525000					CAS No:					75-12-7				
Formic acid	809	0	NI	0	R	2	NI	1	(1)	2	3C	3		NI	D	3
	356	RTECS No LQ4900000					CAS No:					64-18-6				
Fumaric adduct of rosin, water dispersion	810	0	NI	0	R	3	NI	(0)	NI	NI	NI	NI		NI	NI	NI
	357	RTECS No					CAS No:									
Furfural	812	0	NI	0	R	2	NI	2	(2)	3	2	2	C	NI	D	3
	358	RTECS No LT7000000					CAS No:					98-01-1				
Furfuryl alcohol	813	0	NI	0	R	(3)	NI	2	2	3	2	2		NI	D	2
	359	RTECS No LU9100000					CAS No:					98-00-0				
[Glucitol/glycerol blend, propoxylated containing less than 10% amines]	2368	0	NI	0	NR	1	NI	1	0	(2)	(1)	(1)		NI	SD	2
	3074	RTECS No					CAS No:									
Glucose solution	562	0	0	0	R	0	NI	0	0	0	0	(0)		NI	D	0
	361	RTECS No LZ6600000					CAS No:					50-99-7				
Glutaraldehyde solutions (50% or less)	1107	0	NI	0	R	3	0	1	0	4	3	3	S	NI	D	3
	362	RTECS No MA2450000					CAS No:					111-30-8				
Glycerine	814	0	NI	0	R	0	NI	0	0	(1)	0	1		NI	D	1
	363	RTECS No MA8050000					CAS No:					56-81-5				
Glycerine (83%), Dioxanedimethanol (17%) mixture	1743	NI	NI	NI	R	1	NI	0	(0)	(1)	(0)	1		NI	D	1
	364	RTECS No					CAS No:									
Glycerol ethoxylated		NI	NI		NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI
	3123	RTECS No					CAS No:					31694-55-0				
Glycerol monooleate	1898	0	0	0	R	0	NI	0	(0)	(1)	1	1		NI	Fp	2
	365	RTECS No RK1300000					CAS No:					25496-72-4				

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Glycerol polyalkoxylate	815 366	NI	NI		NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI
		RTECS No						CAS No:								
Glycerol propoxylated	2346 3110	0	NI	0	NR	1	NI	1	0	(2)	1	0		NI	D	2
		RTECS No						CAS No:			25791-96-2					
Glycerol, propoxylated and ethoxylated	2276 2872	0	NI	0	NR	1	0	0	0	0	1	1		NI	SD	2
		RTECS No						CAS No:			9082-00-2					
[Glycerol/sorbitol blend, propoxylated and ethoxylated]	2372 3136	0	NI	0	NR	2	NI	NI	NI	NI	NI	NI		NI	NI	NI
		RTECS No						CAS No:								
[Glycerol/sucrose blend propoxylated and ethoxylated]	2361 3124	0	NI	0	NR	1	NI	0	0	0	0	0		NI	SD	0
		RTECS No						CAS No:								
Glyceryl triacetate	816 367	0	NI	0	R	1	0	1	0	0	0	1		NI	D	1
		RTECS No			AK3675000			CAS No:			102-76-1					
Glycidyl ester of C10 trialkylacetic acid	441 368	3	NI	3	NR	3	NI	0	0	(2)	2	1		NI	F	2
		RTECS No						CAS No:			26761-45-5					
Glycine, sodium salt solution	817 369	0	NI	0	NI	0	NI	0	(0)	(1)	(0)	(1)		NI	D	1
		RTECS No			MB7600000			CAS No:			6000-44-8					
Glycolic acid solution (70% or less)	2218 2539	0	0	0	R	1	NI	1	(1)	2	3C	3		NI	D	3
		RTECS No						CAS No:			79-14-1					
Glyoxal solution (40% or less)	84 370	0	NI	0	R	1	NI	0	0	2	2	3	MS	NI	D	3
		RTECS No			MD2700000			CAS No:			107-22-2					
Glyoxylic acid solution (50 % or less)	1535 371	0	NI	0	R	2	0	0	0	(3)	0	3	S	NI	D	3
		RTECS No			MD4550000			CAS No:			298-12-4					
Glyphosate solution (not containing surfactant)	1765 2204	0	0	0	NR	3	0	0	0	(3)	0	3		NI	D	3
		RTECS No			MC1075000			CAS No:			38641-94-0					
Groundnut oil	820 2769	0	NI	0	R	(2)	NI	(0)	(0)	(0)	(0)	0		NI	Fp	2
		RTECS No			RX2830000			CAS No:			8002-03-7					

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3	
Heptane (all isomers)	827	4	NI	4	R	4	NI	0	0	0	(1)	1	A	NI	E	2	
	372	RTECS No MI7700000			CAS No:			142-82-5									
n-Heptanoic acid	831	2	NI	2	R	1	NI	0	0	(3)	3B	(3)		NI	FD	3	
	479	RTECS No MJ1575000			CAS No:			111-14-8									
1-Heptanol	828	2	NI	2	R	2	NI	1	0	2	(2)	(2)		NI	FD	(2)	
	2688	RTECS No MK0350000			CAS No:			111-70-6									
Heptanol (all isomers) (d)	2223	2	NI	2	R	(2)	NI	0	0	(2)	(1)	(2)		NI	FD	2	
	373	RTECS No			CAS No:			111-70-6									
Heptene (all isomers)	2225	3	NI	3	NI	2	NI	(0)	(0)	(2)	(2)	(0)		NI	E	2	
	374	RTECS No			CAS No:												
1-Heptene	832	3	NI	3	NI	2	NI	(0)	(0)	(2)	(2)	(0)		NI	E	2	
	2685	RTECS No MJ8815000			CAS No:			592-76-7									
Heptyl acetate	833	3	NI	3	NI	(3)	NI	0	0	(2)	1	2		NI	F	2	
	375	RTECS No AH9901000			CAS No:			112-06-1									
1-Hexadecylnaphthalene / 1,4-bis(hexadecyl)naphthalene mixture	2159	0	NI	0	NR	0	NI	0	0	(1)	1	1		NI	Fp	2	
	2373	RTECS No			CAS No:												
Hexamethylenediamine adipate (50% in water)	846	0	NI	0	R	1	NI	0	(0)	(0)	0	0		NI	D	0	
	379	RTECS No AV1940000			CAS No:			3323-53-3									
Hexamethylenediamine (molten)	845	0	NI	0	R	2	NI	1	1	(3)	3A	3	SR	NI	D	3	
	378	RTECS No MO1180000			CAS No:			124-09-4									
Hexamethylenediamine solution	845	0	NI	0	R	2	NI	1	1	(3)	3A	3	SR	NI	D	3	
	380	RTECS No MO1180000			CAS No:			124-09-4									
Hexamethylene diisocyanate	2142	3	0	0	NR	2	NI	1	2	4	3	3	S	NI	S	3	
	18	RTECS No			CAS No:			822-06-0									
Hexamethylene glycol	847	0	NI	0	R	1	NI	0	0	(1)	0	1		NI	D	1	
	376	RTECS No MO2100000			CAS No:			629-11-8									

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Hexamethyleneimine	848	1	NI	1	NI	2	NI	3	1	2	NI	NI		NI	FED	2
	381	RTECS No			CM3150000			CAS No:						111-49-9		
Hexamethylenetetramine solutions	849	0	NI	0	R	0	NI	0	0	(1)	0	1	S	NI	D	2
	382	RTECS No			MN4725000			CAS No:						100-97-0		
Hexane	850	3	NI	3	R	4	NI	0	0	0	2	2	NA	NI	E	2
	2683	RTECS No			MN9275000			CAS No:						110-54-3		
Hexane (all isomers)	850	3	NI	3	R	4	NI	0	0	0	2	2	NA	NI	E	2
	383	RTECS No			MN9275000			CAS No:						110-54-3		
1,6-Hexanediol, distillation overheads	2143	4	NI	4	NR	2	NI	0	0	2	1	2		NI	FED	2
	2641	RTECS No						CAS No:						68937-28-0		
Hexanoic acid	853	2	NI	2	R	2	NI	0	0	(3)	(3)	3		NI	FD	3
	384	RTECS No			MO5250000			CAS No:						142-62-1		
Hexanol	854	1	0	0	(R)	2	NI	1	0	(3)	1	3		NI	FD	3
	385	RTECS No			MQ4025000			CAS No:						111-27-3		
Hexene (all isomers)	2224	3	NI	3	R	3	NI	(0)	(0)	(1)	(1)	(1)		NI	E	2
	386	RTECS No						CAS No:						592-41-6		
1-Hexene	855	3	NI	3	R	3	NI	0	0	0	1	1		NI	E	2
	2681	RTECS No			MP6600100			CAS No:						592-41-6		
2-Hexene (mixed isomers)	856	3	NI	3	R	3	NI	(0)	(0)	(1)	(1)	(1)		NI	E	2
	2682	RTECS No						CAS No:						592-43-8		
Hexyl acetate	857	2	NI	2	NI	3	NI	0	0	(1)	1	1		NI	FE	2
	387	RTECS No			AI0875000			CAS No:						142-92-7		
Hexylene glycol	859	0	NI	0	R	0	0	0	0	(2)	2	2		NI	D	2
	388	RTECS No			SA0810000			CAS No:						107-41-5		
Hydrocarbon waxes	2278	0	NI	0	NR	0	0	0	0	2	1	1		NI	Fp	2
	2886	RTECS No						CAS No:								

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Hydrochloric acid	864 389	Inor	0	0	Inorg	1	NI	1	1	3	3C	3		NI	DE	3
			RTECS No			MW4025000		CAS No:								7647-01-0
Hydrogenated starch hydrolysate	2347 3077	0	NI	0	R	0	NI	0	0	(0)	0	0		NI	D	0
			RTECS No					CAS No:								68425-17-2
Hydrogen peroxide, more than 60%	867 2689	Inor	0	0	Inorg	3	NI	1	0	2	3	3		NI	D	3
			RTECS No			MX0900000		CAS No:								7722-84-1
Hydrogen peroxide solutions (over 60% but not over 70% by mass)	867 390	Inor	0	0	Inorg	3	NI	1	0	2	3	3		NI	D	3
			RTECS No			MX0900000		CAS No:								7722-84-1
Hydrogen peroxide solutions (over 8% but not over 60% by mass)	2231 391	Inor	0	0	Inorg	3	NI	1	0	(2)	3	3		NI	D	3
			RTECS No					CAS No:								7722-84-1
2-Hydroxyethyl acrylate	869 51	0	NI	0	R	4	NI	1	3	3	3	3	SM	NI	D	3
			RTECS No			AT1750000		CAS No:								818-61-1
N-(Hydroxyethyl)ethylenediaminetriacetic acid, trisodium salt solution	870 470	0	NI	0	NI	1	NI	0	0	(1)	1	1	R	NI	D	3
			RTECS No			MB9185000		CAS No:								139-89-9
2-Hydroxy-4-(methylthio)butanoic acid	871 49	1	NI	1	R	1	NI	0	0	(3)	1	3		NI	D	3
			RTECS No			ET4761500		CAS No:								583-91-5
2-Hydroxy-4-(methylthio) butanoic acid, methionone hydroxy analogue		NI	NI		NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI
	3016		RTECS No					CAS No:								
Icosa(oxypropane-2,3-diyl)s	2092 392	NI	NI	NI	NI	NI	NI	0	(0)	(2)	2	(2)		NI	Fp	2
			RTECS No					CAS No:								
Illipe oil	2304 3034	(0)	NI	(0)	(R)	(0)	NI	(0)	(0)	(0)	(0)	(0)		NI	Fp	2
			RTECS No					CAS No:								
Interesterified mixed vegetable oils	2355 3115	0	NI	0	R	NI	NI	(0)	(0)	(1)	(1)	(1)		NI	Fp	2
			RTECS No					CAS No:								
Isoamyl alcohol	965 396	1	1	1	(R)	1	0	1	0	(2)	2	2		NI	FED	2
			RTECS No			EL5425000		CAS No:								123-51-3

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Isobutyl alcohol	382	0	NI	0	R	1	0	0	0	1	2	3		NI	D	3
	397	RTECS No NP9625000			CAS No:			78-83-1								
Isobutyl formate	405	1	NI	1	NI	1	NI	0	(0)	0	(1)	(2)		NI	E	2
	398	RTECS No LQ8650000			CAS No:			542-55-2								
Isobutyl methacrylate	408	2	NI	2	NR	1	NI	0	0	0	2	2	S	NI	FED	2
	2673	RTECS No OZ4900000			CAS No:											
Isononylaldehyde	2300	3	NI	3	NR	(3)	NI	0	0	(2)	2	1		NI	F	2
	2754	RTECS No			CAS No:			5435-64-3								
Isophorone	879	1	1	1	R	2	0	1	1	(2)	1	2		NI	FD	2
	399	RTECS No GW7700000			CAS No:			78-59-1								
Isophoronediamine	880	0	0	0	NR	2	0	1	(1)	(3)	3	3	S	NI	D	3
	401	RTECS No GV6129000			CAS No:			2855-13-2								
Isophorone diisocyanate	881	1	NI	1	NR	4	NI	0	0	4	3	3	SA	NI	S	3
	400	RTECS No NQ9370000			CAS No:			4098-71-9								
Isoprene	882	2	2	2	NR	2	NI	0	0	0	1	2	CM	NI	E	3
	402	RTECS No NT4037000			CAS No:			78-79-5								
Isopropanolamine	1182	0	NI	0	R	2	NI	0	1	0	3	3		NI	D	3
	403	RTECS No UA5775000			CAS No:			78-96-6								
Isopropyl acetate	1192	1	NI	1	R	1	NI	0	0	0	1	2		NI	ED	2
	404	RTECS No AI4930000			CAS No:			108-21-4								
Isopropyl alcohol	1181	0	NI	0	R	0	0	0	0	0	1	2		NI	D	2
	405	RTECS No NT8050000			CAS No:			67-63-0								
Isopropylamine	1195	0	NI	0	R	2	NI	2	2	1	3	3		0	DE	3
	407	RTECS No NT8400000			CAS No:			75-31-0								
Isopropylamine (70% or less) solution	2350	0	NI	0	R	2	NI	2	2	1	3	3		NI	DE	3
	395	RTECS No			CAS No:			75-31-0								

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
isopropylbenzene	1197 2687	3	2	2	R	3	NI	0	0	0	2	1		NI	FE	2
		RTECS No			GR8575000			CAS No:			98-82-8					
Isopropylcyclohexane	1199 408	4	NI	4	(NR)	(3)	NI	(0)	(0)	(1)	(0)	(1)		NI	FE	2
		RTECS No						CAS No:			696-29-7					
Isopropyl ether	711 406	1	NI	1	NR	2	NI	0	0	0	1	1		NI	E	2
		RTECS No			TZ5425000			CAS No:			108-20-3					
[Jeffamine D-230]	2352 3112	1	NI	1	NR	1	NI	0	0	(3)	3	3		NI	NI	3
		RTECS No						CAS No:								
[Jeffamine HK-511]	2353 3113	0	NI	0	NR	2	NI	NI	NI	NI	NI	NI		NI	NI	NI
		RTECS No						CAS No:			194673-87-5					
Kaolin slurry	883 409	Inor	NI	0	Inorg	0	NI	0	0	0	0	0		NI	S	0
		RTECS No			GF1670500			CAS No:			1332-58-7					
Lactic acid	886 410	0	NI	0	R	1	NI	0	0	(3)	2	3		NI	D	3
		RTECS No			OD2800000			CAS No:			50-21-5					
Lactonitrile solution (80% or less)	887 411	0	NI	0	R	4	NI	2	4	(4)	NI	NI		NI	D	3
		RTECS No			OD8225000			CAS No:			78-97-7					
Lard	2317 3047	0	NI	0	R	0	NI	0	(0)	(1)	0	1		NI	Fp	2
		RTECS No						CAS No:								
Lard (containing less than 1% free fatty acids)	888 412	0	NI	0	R	0	NI	0	(0)	(1)	0	1		NI	Fp	2
		RTECS No						CAS No:			61789-99-9					
Latex, ammonia (1% or less), inhibited	889 413	0	NI	0	R	(2)	NI	0	0	(1)	0	1		NI	D	1
		RTECS No						CAS No:								
Latex: Carboxylated styrene-Butadiene copolymer; Styrene-Butadiene rubber	1274 414	0	NI	0	NR	0	NI	0	0	(1)	0	1		NI	D	1
		RTECS No						CAS No:								
Lauric acid	891 415	4	NI	4	R	4	1	0	(0)	(2)	1	2		NI	Fp	2
		RTECS No			OE9800000			CAS No:			143-07-7					

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Lecithin	2146	0	NI	0	R	0	NI	0	0	(0)	0	(0)		NI	SD	0
	417	RTECS No						CAS No:						8030-76-0		
Ligninsulphonic acid, sodium salt solution	34	0	NI	0	(NR)	(0)	NI	0	(0)	(0)	(0)	(0)		NI	D	0
	419	RTECS No						CAS No:						8061-51-6		
Linear alkyl (C12-C16) propoxyamine ethoxylate		NI	NI		NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI
	3015	RTECS No						CAS No:								
Linseed oil	2318	0	NI	0	R	(2)	NI	0	(0)	(1)	0	(1)		NI	Fp	2
	3048	RTECS No						CAS No:								
Linseed oil (containing less than 2% free fatty acids)	905	0	NI	0	R	(2)	NI	0	(0)	(1)	0	(1)		NI	Fp	2
	2767	RTECS No			OI9690000			CAS No:						8001-26-1		
Liquid chemical wastes		NI	NI		NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI
	420	RTECS No						CAS No:								
Long-chain alkaryl polyether (C11-C20)	1982	(4)	NI	(4)	NR	3	(1)	0	0	(2)	0	2		NI	Fp	2
	421	RTECS No						CAS No:						26401-47-8		
Long-chain alkaryl sulphonic acid (C16-C60)	1966	0	NI	0	(NR)	0	NI	0	0	(2)	(1)	2		NI	Fp	2
	424	RTECS No						CAS No:								
Long-chain alkylphenate/Phenol sulphide mixture	1754	(0)	NI	(0)	(NR)	0	NI	0	0	(2)	2	2	S	NI	Fp	3
	425	RTECS No						CAS No:								
Long-chain polyetheramine in alkyl (C2-C4) benzenes	1457	NI	NI	NI	NR	2	NI	0	0	(2)	2	2		NI	Fp	2
	422	RTECS No						CAS No:								
Long-chain polyetheramine in aromatic solvent	1457	NI	NI	NI	NR	2	NI	0	0	(2)	2	2		NI	Fp	2
	423	RTECS No						CAS No:								
L-Lysine solution (60% or less)	2199	0	0	0	R	1	0	0	0	0	1	NI		NI	D	1
	2306	RTECS No						CAS No:						56-87-1		
Magnesium chloride solution	915	Inor	0	0	Inorg	1	0	0	0	(0)	0	0		NI	D	0
	427	RTECS No			OM2800000			CAS No:						7786-30-3		

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Magnesium hydroxide slurry	916	Inor	0	0	Inorg	0	NI	0	0	(1)	(0)	1		NI	S	1
	428	RTECS No			OM3570000	CAS No:						1309-42-8				
Magnesium lignosulphonate solutions	2356	(0)	NI	(0)	(NR)	(0)	NI	0	0	(0)	(0)	(0)		NI	D	0
	3116	RTECS No			CAS No:						8061-54-9					
Magnesium long-chain alkaryl sulphonate (C11-C50)	1967	0	NI	0	NR	0	NI	0	0	(2)	1	2	S	NI	Fp	3
	430	RTECS No			CAS No:						71786-47-5					
Magnesium long-chain alkyl salicylate (C11+)	71	(0)	NI	(0)	NR	(2)	NI	0	0	(1)	(1)	(1)	S	NI	S	2
	429	RTECS No			CAS No:											
Maleic anhydride	921	1	NI	1	R	2	0	1	2	(3)	3	3	S	NI	D	3
	431	RTECS No			ON3675000	CAS No:						108-31-6				
Maltitol Syrup	2348	0	NI	0	R	0	NI	0	0	(0)	0	0		NI	D	0
	3078	RTECS No			CAS No:						585-88-6					
Mango kernel oil	2305	(0)	NI	(0)	(R)	(0)	NI	(0)	(0)	(0)	(0)	(0)		NI	Fp	2
	3035	RTECS No			CAS No:						167747-36-6					
Mercaptobenzothiazol, sodium salt solution	925	2	1	1	NR	4	2	0	0	(0)	0	0	S	NI	S	2
	432	RTECS No			DL6475000	CAS No:						149-30-4				
Mesityl oxide	946	1	NI	1	R	(1)	NI	1	0	2	2	2		NI	D	2
	433	RTECS No			SB4200000	CAS No:						141-79-7				
Metam sodium solution	202	0	NI	0	NR	5	NI	1	2	(2)	2	1	S	NI	D	2
	434	RTECS No			FC2100000	CAS No:						137-42-8				
Methacrylic acid - alkoxy poly (alkylene oxide) methacrylate copolymer, sodium salt aqueous solution (45% or less)	2288	NI	0	0	NR	1	NI	0	(0)	(1)	1	0		NI	D	1
	2819	RTECS No			CAS No:											
Methacrylic acid	948	0	NI	0	R	2	0	1	2	2	3	3		NI	D	3
	435	RTECS No			OZ2975000	CAS No:						79-41-4				
Methacrylic resin in ethylene dichloride	2046	1	1	1	NR	2	0	(1)	(0)	(2)	(1)	(2)	C	NI	SD	3
	436	RTECS No			CAS No:											

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3	
Methacrylonitrile	949	0	NI	0	R	2	0	3	2	4	1	1	S	NT	ED	3	
	437	RTECS No UD1400000			CAS No:			126-98-7									
3-Methoxy-1-butanol	952	0	NI	0	R	(1)	NI	0	0	(1)	0	1		NI	D	1	
	57	RTECS No			CAS No:			2517-43-3									
3-Methoxybutyl acetate	953	1	1	1	R	3	NI	0	(0)	(1)	1	1		NI	FED	1	
	58	RTECS No EL4725000			CAS No:			4435-53-4									
N-(2-Methoxy-1-methyl ethyl)-2-ethyl-6-methyl chloroacetanilide	113	2	2	2	NR	5	1	1	0	(2)	1	0	S	NI	S	2	
	469	RTECS No AN3430000			CAS No:			51218-45-2									
Methyl acetate	954	0	NI	0	R	1	NI	0	0	0	1	2		NI	DE	2	
	438	RTECS No AI9100000			CAS No:			79-20-9									
Methyl acetoacetate	335	0	NI	0	R	1	NI	0	0	(2)	1	2		NI	D	2	
	439	RTECS No AK5775000			CAS No:			105-45-3									
Methyl acrylate	955	0	NI	0	R	3	NI	2	1	2	3	3	MS	NI	D	3	
	440	RTECS No AT2800000			CAS No:			96-33-3									
Methyl alcohol	951	0	NI	0	R	0	0	3	(3)	(4)	2	2	T	NI	DE	3	
	441	RTECS No PC1400000			CAS No:			67-56-1									
Methylal, technical		NI	NI		NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI	
	2724	RTECS No			CAS No:												
Methylamine solutions (42% or less)	957	0	NI	0	R	2	NI	2	(2)	3	3	3	M	NT	DE	3	
	455	RTECS No PF6300000			CAS No:			74-89-5									
Methylamyl acetate	858	2	NI	2	NI	3	NI	0	0	0	1	(2)		NI	FED	2	
	456	RTECS No SA7525000			CAS No:			108-84-9									
Methylamyl alcohol	958	1	NI	1	R	1	NI	1	0	2	1	3		NI	FED	3	
	457	RTECS No SA7350000			CAS No:			108-11-2									
Methyl amyl ketone	959	1	NI	1	NI	1	NI	1	0	0	1	1		NI	FED	2	
	442	RTECS No MJ5075000			CAS No:			110-12-3									

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
N-Methylaniline	961	1	NI	1	(NR)	3	1	1	1	(2)	(1)	1		NI	FD	2
	3107		RTECS No			BY4550000		CAS No:								100-61-8
Methylbutenol	967	0	NI	0	R	2	NI	1	0	(2)	2	2		NI	D	2
	458		RTECS No			EM9472500		CAS No:								556-82-1
Methyl tert-butyl ether	969	1	NI	1	NR	1	0	0	0	0	2	1		T	ED	2
	454		RTECS No			KN5250000		CAS No:								1634-04-4
Methyl butyl ketone	970	1	NI	1	R	1	0	0	0	0	1	1	RN	NI	FED	3
	443		RTECS No			MP1400000		CAS No:								591-78-6
Methylbutynol	968	0	NI	0	NR	1	NI	1	1	3	0	2		NI	D	2
	459		RTECS No			ES0810000		CAS No:								115-19-5
Methyl butyrate	973	1	NI	1	NI	(2)	NI	0	0	2	2	(2)		NI	ED	2
	444		RTECS No			ET5500000		CAS No:								623-42-7
Methylcyclohexane	976	3	3	3	NR	3	1	0	0	1	1	1	A	NI	E	2
	460		RTECS No			GV6125000		CAS No:								108-87-2
Methylcyclopentadiene dimer	977	4	NI	4	(NR)	(3)	NI	0	(0)	(2)	(2)	(2)		NI	F	2
	461		RTECS No			PC1075000		CAS No:								26472-00-4
Methylcyclopentadienyl manganese tricarbonyl	2213	3	NI	3	NR	4	NI	2	3	4	1	1		NI	S	3
	2692		RTECS No					CAS No:								12108-13-3
Methyl cyclopentadienyl manganese tricarbonyl (60-70%) in mineral oil		NI	NI		NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI
	3055		RTECS No					CAS No:								
Methyl diethanolamine	1491	0	NI	0	R	2	NI	1	0	(2)	1	2		NI	D	2
	445		RTECS No			KL7525000		CAS No:								105-59-9
Methylene bithiocyanate	2235	2	NI	2	NR	5	NI	2	0	4	NI	NI	S	NI	NI	3
	2693		RTECS No					CAS No:								6317-18-6
Methylene bridged isobutenylated phenols	2290	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI
	82		RTECS No					CAS No:								

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
2-Methyl-6-ethyl aniline	984	2	NI	2	NR	2	NI	1	1	(2)	0	2		NI	FD	2
	54	RTECS No BY5600000						CAS No:			24549-06-2					
Methyl ethyl ketone	385	0	NI	0	R	1	0	0	0	1	2	2		NI	DE	2
	446	RTECS No EL6475000						CAS No:			78-93-3					
2-Methyl-5-ethyl pyridine	986	2	NI	2	NI	2	NI	1	2	(3)	3	3		NI	FD	3
	53	RTECS No TJ6825000						CAS No:			104-90-5					
Methyl formate	987	0	NI	0	R	1	NI	1	0	2	0	2		NI	DE	2
	447	RTECS No LQ8925000						CAS No:			107-31-3					
N-Methylglucamine solution (70% or less)	2048	0	NI	0	R	0	NI	1	0	(3)	0	3		NI	D	3
	482	RTECS No 000000000						CAS No:			6284-40-8					
2-Methyl Glutaronitrile		NI	NI		NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI
	2908	RTECS No						CAS No:								
2-Methylglutaronitrile (Crude)		NI	NI		NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI
	2929	RTECS No						CAS No:								
Methyl heptyl ketone	988	3	NI	3	R	3	NI	0	0	NI	NI	NI		NI	FED	NI
	448	RTECS No RA8225000						CAS No:			821-55-6					
2-Methyl-2-hydroxy-3-butyne	968	0	NI	0	NR	1	NI	1	1	3	0	2		NI	D	2
	52	RTECS No ES0810000						CAS No:			115-19-5					
Methyl isobutyl ketone	971	1	NI	1	R	1	0	1	0	2	2	3		NI	FED	3
	449	RTECS No SA9275000						CAS No:			108-10-1					
Methyl methacrylate	995	1	NI	1	R	2	NI	0	0	0	2	2	S	NI	ED	2
	450	RTECS No OZ5075000						CAS No:			80-62-6					
3-Methyl-3-methoxybutanol	996	1	NI	1	NR	0	NI	0	(0)	(2)	1	(2)		NI	FD	2
	59	RTECS No						CAS No:			56539-66-3					
3-Methyl-3-methoxybutyl acetate	997	1	NI	1	NR	0	NI	0	(0)	NI	NI	NI		NI	F	NI
	60	RTECS No						CAS No:								

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Methyl naphthalene (molten)	1999 451	4	NI	4	(NR)	(4)	NI	1	0	(2)	1	1		T	F	2
			RTECS No					CAS No:								
2-Methylpentane	1000 2684	3	NI	3	NI	4	NI	(0)	(0)	(2)	(2)	(2)		NI	E	2
			RTECS No	SA2995000				CAS No:						107-83-5		
2-Methyl-1,3-propanediol	2200 2213	0	0	0	NR	0	0	0	0	(0)	0	0		NI	D	0
			RTECS No					CAS No:						2163-42-0		
Methyl propyl ketone	1003 452	0	NI	0	R	0	NI	1	0	(2)	1	2		NI	FED	2
			RTECS No	SA7875000				CAS No:						107-87-9		
2-Methylpyridine	1005 55	1	NI	1	R	1	NI	1	2	1	3A	3		NI	D	3
			RTECS No	TJ4900000				CAS No:						109-06-8		
3-Methylpyridine	1006 61	1	NI	1	R	1	NI	1	2	2	3	3		NI	D	3
			RTECS No	TJ5000000				CAS No:						108-99-6		
4-Methylpyridine	1007 63	1	NI	1	R	1	NI	1	2	2	3	3		NI	D	3
			RTECS No	UT5425000				CAS No:						108-89-4		
N-Methyl-2-pyrrolidone	1008 481	0	NI	0	R	1	NI	0	0	2	1	2	R	NI	D	3
			RTECS No	UY5790000				CAS No:						872-50-4		
Methyl salicylate	86 453	2	NI	2	R	2	NI	1	1	1	2	1	R	NI	SD	3
			RTECS No	VO4725000				CAS No:						119-36-8		
alpha-Methylstyrene	1010 107	3	3	3	NR	3	NI	0	0	1	2	1	M	(T)	FE	3
			RTECS No	WL5075300				CAS No:						25013-15-4		
3-(methylthio)propionaldehyde	993 2368	0	NI	0	R	3	1	1	1	2	2	3	NS	T	D	3
			RTECS No	UE2285000				CAS No:						3268-49-3		
Microsilica slurry	1514 2507	Inor	0	0	Inorg	0	0	(0)	(0)	NI	(0)	(0)		NI	S	0
			RTECS No					CAS No:						69012-64-2		
Molasses	1013 462	0	NI	0	R	0	NI	0	0	0	0	0		NI	D	0
			RTECS No					CAS No:								

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3	
Molybdenum Polysulfide Long Chain Alkyl Dithiocarbamide Complex.	2344 3108	4	2	2	NR	2	0	0	0	(2)	2	2		NI	Fp	2	
		RTECS No			CAS No:												
Morpholine	1018 463	0	0	0	R	2	NI	1	2	2	3	3		NI	D	3	
		RTECS No QD6475000			CAS No:			110-91-8									
Motor fuel anti-knock compounds (containing lead alkyls)	1303 464	4	5	5	NR	5	NI	3	2	4	2	2	NR	NI	S	3	
		RTECS No TP4550000			CAS No:			78-00-2									
Myrcene	1019 465	4	NI	4	R	4	1	0	0	(2)	2	NI		NI	F	2	
		RTECS No RG5365000			CAS No:			123-35-3									
[Nalco 5740S Antifoam]	2291 492	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI	
		RTECS No			CAS No:												
Naphthalene (molten)	1 493	3	3	3	NR	4	1	1	0	(2)	1	1	C	T	S	3	
		RTECS No QJ0525000			CAS No:			91-20-3									
Naphthalenesulphonic acid-Formaldehyde copolymer, sodium salt solution	1020 494	0	1	1	(NR)	1	NI	0	(0)	(1)	0	1		NI	D	1	
		RTECS No EC4850000			CAS No:			9084-06-4									
Naphthenic acids	1021 495	NI	NI	NI	NI	3	NI	1	NI	NI	NI	NI		(T)	FD	NI	
		RTECS No QK8750000			CAS No:			1338-24-5									
Neodecanoic acid	1025 496	4	NI	4	NR	2	NI	0	0	(2)	0	2		NI	Fp	2	
		RTECS No			CAS No:			26896-20-8									
Nitrating acid (mixture of sulphuric and nitric acids)	289 497	Inor	NI	0	Inorg	(2)	NI	3	3	4	3C	3		NI	D	3	
		RTECS No			CAS No:												
Nitric acid (70% and over)	1029 498	Inor	NI	0	Inorg	2	NI	(3)	(1)	4	3C	3		NI	D	3	
		RTECS No QU5775000			CAS No:			7697-37-2									
Nitric acid (less than 70%)	1029 499	Inor	NI	0	Inorg	2	NI	(3)	(1)	4	3C	3		NI	D	3	
		RTECS No QU5775000			CAS No:			7697-37-2									
Nitrilotriacetic acid, trisodium salt solution	1030 500	0	NI	0	R	1	0	1	(0)	0	1	1	CMR	NI	D	3	
		RTECS No MB8400000			CAS No:			5064-31-3									

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Nitrobenzene	1017 501	1	1	1	R	3	(4)	(2)	2	2	1	1	CRT	NI	SD	3
		RTECS No DA6475000						CAS No:			98-95-3					
Nitroethane	1037 502	0	NI	0	NR	2	NI	1	0	(2)	(0)	(1)		NI	SD	2
		RTECS No KI5600000						CAS No:			79-24-3					
Nitroethane(80%)/ Nitropropane(20%)	2245 503	0	1	1	NR	2	NI	1	1	2	0	1		NI	E	2
		RTECS No						CAS No:								
Nitroethane, 1-Nitropropane (each 15% or more) mixture	2270 2212	(0)	(1)	(1)	(NR)	(2)	NI	1	1	2	0	1		NI	FED	2
		RTECS No						CAS No:								
o-Nitrophenol (molten)	1041 536	1	2	2	R	3	(2)	0	0	(1)	1	1		NI	S	1
		RTECS No SM2100000						CAS No:			88-75-5					
1-Nitropropane	1044 2747	(0)	(1)	(1)	(NR)	(2)	NI	1	0	2	0	1		NI	FED	2
		RTECS No TZ5075000						CAS No:			108-03-2					
1- or 2-Nitropropane	2242 20	0	1	1	NR	1	NI	2	0	2	0	1	C	NI	FED	3
		RTECS No						CAS No:			108-03-2					
2-Nitropropane	1045 2748	(0)	(1)	(1)	(NR)	(2)	NI	2	0	2	0	0	C	NI	FED	3
		RTECS No TZ5250000						CAS No:								
Nitropropane (60%)/Nitroethane (40%) mixture	1046 504	0	1	1	NR	2	NI	1	0	2	0	1	C	NI	FED	3
		RTECS No						CAS No:								
o-Nitrotoluene	1049 2745	2	2	2	NR	2	(1)	1	0	(2)	0	1	CMR	NI	S	3
		RTECS No XT3150000						CAS No:			88-72-2					
p-Nitrotoluene	1051 2746	2	1	1	NR	3	0	1	0	(2)	0	1	R	NI	S	3
		RTECS No XT3325000						CAS No:			99-99-0					
o- or p-Nitrotoluenes	2241 532	2	2	2	NR	3	(1)	1	0	(2)	0	1	CMR	NI	S	3
		RTECS No						CAS No:			88-72-2					
Nonane (all isomers)	1054 506	4	NI	4	R	4	NI	0	0	1	0	0	A	NI	FE	2
		RTECS No RA6115000						CAS No:			111-84-2					

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Nonanoic acid (all isomers)	1055 507	3	NI	3	R	2	NI	0	0	(3)	2	3		NI	F	3
			RTECS No	RA6650000				CAS No:							112-05-0	
Nonene (all isomers)	2222 508	4	NI	4	NI	3	NI	0	0	0	1	1	A	NI	FE	2
			RTECS No					CAS No:							27215-95-8	
1-Nonene	1060 2680	4	NI	4	NI	3	NI	0	0	0	1	1	A	NI	FE	2
			RTECS No					CAS No:							124-11-8	
Nonyl acetate	1766 509	4	NI	4	NI	NI	NI	0	0	NI	NI	NI		NI	F	NI
			RTECS No					CAS No:							143-13-5	
Nonyl alcohol (all isomers)	1059 510	3	NI	3	NR	3	1	0	0	(2)	2	2		NI	Fp	2
			RTECS No	RH1400000				CAS No:							2430-22-0	
Nonyl methacrylate monomer	1061 511	5	NI	5	R	3	NI	(0)	(0)	(1)	(1)	(1)		NI	F	1
			RTECS No					CAS No:							2696-43-7	
Nonylphenol	1062 512	5	4	4	NR	5	3	1	0	(3)	3	3		NI	FD	3
			RTECS No	SM5600000				CAS No:							25154-52-3	
Nonylphenol poly(4+)ethoxylate	1063 513	4	NI	4	NR	3	1	0	0	(2)	2	1		NI	D	2
			RTECS No					CAS No:								
Octane (all isomers)	1072 538	5	NI	5	(R)	4	NI	(0)	(0)	0	0	0	A	NI	FE	2
			RTECS No	RG8400000				CAS No:							111-65-9	
Octanoic acid (all isomers)	1074 539	3	NI	3	R	1	NI	0	0	(3)	3	3		NI	F	3
			RTECS No	RH0175000				CAS No:							124-07-2	
Octanol (all isomers)	1075 540	3	NI	3	R	2	0	1	0	(2)	2	2		NI	Fp	2
			RTECS No	RH6550000				CAS No:							111-87-5	
1-Octanol	1075 2676	3	NI	3	R	2	0	1	0	(2)	2	2		NI	Fp	2
			RTECS No	RH6550000				CAS No:							111-87-5	
iso-Octanol	1076 2675	3	NI	3	R	2	0	1	0	(2)	2	(2)		NI	F	2
			RTECS No	NS7700000				CAS No:							26952-21-6	

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Octene (all isomers)	1079	4	NI	4	NR	3	NI	0	0	0	2	1	A	NI	FE	2
	541	RTECS No					CAS No:									
n-Octyl acetate	1080	3	NI	3	R	2	NI	0	0	(1)	1	NI		NI	FD	1
	483	RTECS No AJ1400000					CAS No:					112-14-1				
Octyl aldehydes	1071	2	NI	2	NI	3	NI	0	0	(1)	1	1		NI	F	1
	542	RTECS No					CAS No:					63885-09-6				
Octyl decyl adipate	1082	0	NI	0	R	(0)	(0)	(0)	(0)	(1)	(1)	(1)		NI	Fp	2
	543	RTECS No					CAS No:					110-29-2				
Olefin-Alkyl ester copolymer (molecular weight 2000+)	1965	NI	NI	0	NR	0	NI	0	0	(0)	0	0		NI	Fp	2
	546	RTECS No					CAS No:									
Olefin mixtures (C5-C7)	2243	3	NI	3	R	3	NI	(0)	(0)	(2)	(2)	(1)	A	NI	E	2
	545	RTECS No					CAS No:									
Olefin mixtures (C5-C15)	2321	(5)	NI	(5)	R	(4)	NI	(0)	(0)	(2)	(2)	(1)	A	NI	FE	2
	544	RTECS No					CAS No:					6842-15-5				
Olefins (C13+, all isomers)	2028	5	NI	5	NR	0	NI	0	0	(0)	0	0		NI	Fp	2
	547	RTECS No					CAS No:									
alpha-Olefins (C6-C18) mixtures	2030	(5)	NI	(5)	R	(4)	NI	(0)	(0)	(2)	(2)	(1)	A	NI	FE	2
	108	RTECS No					CAS No:					821-95-4				
Oleic acid	1089	0	NI	0	R	0	NI	0	1	(2)	1	1		NI	Fp	2
	548	RTECS No RG2275000					CAS No:					112-80-1				
Oleum	1280	Inor	NI	Inorg	Inorg	2	NI	(3)	(3)	4	3C	3	C	NI	D	3
	549	RTECS No WS5600000					CAS No:					7664-93-9				
Oleylamine	1862	0	NI	0	NR	4	NI	1	(1)	(3)	3B	3		NI	Fp	3
	550	RTECS No					CAS No:					112-90-3				
Olive oil	1090	0	NI	0	R	(2)	NI	(0)	(0)	(1)	1	1		NI	Fp	2
	2771	RTECS No RK4300000					CAS No:					8001-25-0				

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Oxygenated aliphatic hydrocarbon mixture	2266 2825	5	2	(2)	NR	1	NI	0	0	(1)	1	1		NI	FE	2
		RTECS No						CAS No:								
Palm acid oil	2307 3037	(0)	NI	(0)	(R)	(0)	NI	0	(0)	(1)	0	1		NI	Fp	2
		RTECS No						CAS No:			68440-15-3					
Palm fatty acid distillate	2310 3040	NI	NI	(0)	(R)	(0)	NI	0	(0)	(1)	0	1		NI	Fp	2
		RTECS No						CAS No:								
Palm kernel acid oil	1095 553	0	NI	0	R	(3)	NI	0	0	(2)	1	2		NI	Fp	2
		RTECS No						CAS No:			8023-79-8					
Palm kernel fatty acid distillate	2335 3089	(4)	0	0	R	(3)	NI	0	(0)	(2)	1	2		NI	NI	NI
		RTECS No						CAS No:								
Palm kernel oil	1094 2766	0	NI	0	R	(2)	NI	(0)	(0)	(1)	(0)	(1)		NI	Fp	2
		RTECS No						CAS No:			8023-79-8					
Palm kernel olein	2308 3038	(0)	NI	(0)	(R)	1	NI	(0)	(0)	(0)	(0)	(0)		Ni	Fp	2
		RTECS No						CAS No:								
Palm kernel stearin	2309 3039	0	(0)	(0)	(R)	0	NI	(0)	(0)	(0)	(0)	(0)		NI	Fp	2
		RTECS No						CAS No:								
Palm Mid Fraction	2363 3126	(0)	NI	(0)	(R)	(0)	NI	0	0	(0)	(0)	(0)		NI	Fp	2
		RTECS No						CAS No:								
Palm oil	2249 2764	0	NI	0	R	0	NI	0	(0)	(0)	0	0		NI	Fp	2
		RTECS No						CAS No:			8023-79-8					
Palm oil (containing less than 15% free fatty acids)	2319 3049	0	NI	0	R	0	NI	0	(0)	(1)	(0)	(1)		NI	Fp	2
		RTECS No						CAS No:								
Palm oil (containing more than 15% and less than 30% free fatty acids)	2364 3127	0	NI	0	R	0	NI	0	0	(2)	(2)	(2)		NI	Fp	2
		RTECS No						CAS No:			8002-75-3					
Palm oil fatty acid methyl ester	1097 554	0	NI	0	R	0	NI	(0)	(0)	(0)	(0)	(1)		NI	Fp	2
		RTECS No						CAS No:			91051-34-2					

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Palm olein	2250	0	NI	0	R	0	NI	0	(0)	(0)	0	0		NI	Fp	2
	2765	RTECS No					CAS No:					8023-79-8				
Palm stearin	2251	0	NI	0	R	0	NI	0	(0)	(0)	0	0		NI	Fp	2
	555	RTECS No					CAS No:					8002-75-3				
Paraffin wax	1086	0	NI	0	R	0	NI	(0)	(0)	(1)	1	1		NI	Fp	2
	556	RTECS No RV0350000					CAS No:					8002-74-2				
Paraldehyde	1098	0	0	0	NR	0	NI	1	0	0	1	3		NI	D	3
	557	RTECS No YK0525000					CAS No:					123-63-7				
Paraldehyde-ammonia reaction product	2131	1	NI	1	R	2	NI	2	1	(3)	3B	3		NI	FED	3
	1989	RTECS No					CAS No:					68391-11-7				
Pentachloroethane	1099	3	2	2	NI	3	1	1	(1)	1	(1)	(1)	CT	NI	S	3
	558	RTECS No KI6300000					CAS No:					76-01-7				
1,3-Pentadiene	1102	2	NI	2	NI	2	NI	0	0	0	1	(2)		NI	E	2
	14	RTECS No RZ2464000					CAS No:					504-60-9				
Pentaethylenhexamine	1103	0	NI	0	NI	4	NI	1	(2)	(3)	3	(3)	S	NI	D	3
	560	RTECS No RZ2680000					CAS No:					4067-16-7				
Pentane (all isomers)	1105	3	NI	3	R	3	NI	0	0	0	1	1		NI	E	2
	561	RTECS No RZ9450000					CAS No:					109-66-0				
Pentanoic acid	1109	1	NI	1	NI	2	NI	1	2	(3)	3	3		NI	FD	3
	562	RTECS No YV6100000					CAS No:					109-52-4				
n-Pentanoic acid (64%)/2-Methyl butyric acid (36%) mixture	2144	(1)	NI	(1)	NI	(2)	NI	(1)	(2)	(3)	3	(3)		NI	FD	3
	2211	RTECS No					CAS No:									
Pentene (all isomers)	1992	2	NI	2	NI	(2)	NI	(0)	(0)	(0)	(0)	(1)		NI	E	2
	563	RTECS No					CAS No:									
1-Pentene	1114	2	NI	2	NI	(2)	NI	(0)	(0)	0	(0)	(1)		NI	E	2
	2679	RTECS No					CAS No:					109-67-1				

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
2-Pentene	1115 2678	2	NI	2	NI	2	NI	(0)	(0)	(1)	(0)	(1)		NI	E	2
			RTECS No					CAS No:								109-68-2
iso-Pentene	1113 2677	2	NI	2	NI	2	NI	(0)	(0)	(0)	(0)	(1)		NI	E	2
			RTECS No		EM7600000			CAS No:								563-45-1
n-Pentyl propionate	1484 484	2	NI	2	R	2	NI	0	0	(2)	2	1		NI	F	2
			RTECS No					CAS No:								624-54-4
Peracetic acid	1116 2694	NI	NI		NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI
			RTECS No		SD8750000			CAS No:								
Perchloroethylene	1295 564	3	2	2	NR	(3)	2	0	0	0	2	1	C	NI	S	3
			RTECS No		KX3850000			CAS No:								127-18-4
Petrolatum	2244 565	0	NI	0	NR	0	NI	0	0	2	1	1		NI	Fp	2
			RTECS No					CAS No:								8002-74-2
Phenol	1124 566	1	2	2	R	3	0	2	2	(3)	3	3		NT	S	3
			RTECS No		SJ3325000			CAS No:								108-95-2
1-Phenyl-1-xylyl ethane	1135 23	5	4	4	NR	(2)	NI	1	0	(1)	(0)	0		NI	F	1
			RTECS No		CZ7300000			CAS No:								40766-31-2
Phosphate esters, alkyl (C12-C14) amine	1854 1345	2	NI	2	NR	3	NI	0	(0)	(2)	1	2		NI	FD	2
			RTECS No					CAS No:								
Phosphoric acid	1138 567	Inor	NI	INORG	Inorg	1	NI	(3)	(3)	3	3	3		NI	D	3
			RTECS No		TB6300000			CAS No:								7664-38-2
Phosphorus, yellow or white	1139 568	Inor	(3)	(3)	Inorg	6	4	0	0	0	2	1		NI	S	2
			RTECS No		TH3500000			CAS No:								7723-14-0
Phthalic anhydride (molten)	1146 569	1	NI	1	R	2	0	1	0	(3)	1	3	S	NI	S	3
			RTECS No		TI3150000			CAS No:								85-44-9
alpha-Pinene	40 109	4	NI	4	NI	4	NI	0	0	0	1	(1)	S	T	F	3
			RTECS No		DT7000000			CAS No:								80-56-8

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
beta-Pinene	41	4	NI	4	NI	4	NI	0	0	0	1	(1)	S	NT	F	3
	141	RTECS No DT5078500						CAS No:			127-91-3					
Pine oil	1148	4	NI	4	NR	4	NI	0	0	(1)	(1)	(1)	S	(T)	Fp	3
	570	RTECS No TK5100000						CAS No:			8002-09-3					
Polyacrylic acid solution (40% or less)	2302	(2)	NI	(2)	NR	1	NI	0	0	(1)	1	1		NI	D	1
	2709	RTECS No						CAS No:								
Polyalkyl (C18-C22) acrylate in xylene	1151	(3)	NI	(3)	NR	2	NI	0	0	(2)	2	1		NI	Fp	2
	580	RTECS No						CAS No:								
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether	1152	1	NI	1	R	1	0	0	0	0	2	2		NI	D	2
	576	RTECS No						CAS No:								
Poly(2-8)alkylene glycol monoalkyl (C1-C6) ether acetate	2254	1	NI	1	NR	2	1	0	0	0	2	2		NI	D	2
	575	RTECS No						CAS No:								
Polyalkylene oxide polyol	1441	NI	NI		NI	NI	NI	NI	NI	NI	NI	NI		NI	SD	NI
	583	RTECS No TQ8170000						CAS No:								
Polyalkyl (C10-C20) methacrylate	1984	(5)	NI	(5)	NR	0	NI	0	0	0	0	0		NI	Fp	2
	2189	RTECS No						CAS No:								
Polyalkyl (C10-C18) methacrylate/ethylene-propylene copolymer mixture	2201	0	0	0	NR	0	0	0	0	(1)	1	1	A	NI	Fp	3
	2188	RTECS No						CAS No:								
Polyaluminium chloride solution	1136	Inor	0	0	Inorg	0	NI	(0)	(0)	(1)	(0)	(1)		NI	D	1
	584	RTECS No BD0549500						CAS No:			1327-41-9					
Polybutene	1154	0	NI	0	(NR)	(0)	(0)	(0)	(0)	(0)	(0)	(0)		NI	Fp	2
	585	RTECS No EM9032000						CAS No:			9003-29-6					
Polybutenyl succinimide	2055	5	NI	5	NR	0	NI	(0)	(0)	(0)	0	(0)		NI	Fp	2
	586	RTECS No						CAS No:								
Poly(2+)cyclic aromatics	2246	4	4	4	NR	(4)	NI	(1)	(1)	(2)	(1)	(1)	CM	NI	S	3
	574	RTECS No						CAS No:			91-20-3					

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Polyether (molecular weight 2000+)	1975 587	0	NI	0	NR	1	NI	0	(0)	(0)	0	0		NI	Fp	2
			RTECS No					CAS No:								25322-68-3
Polyetheramine	2946	NI	NI		NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI
			RTECS No					CAS No:								
Polyether, borated	1863 572	0	NI	0	NR	3	NI	0	(0)	(1)	1	0		NI	D	1
			RTECS No					CAS No:								
Polyethylene glycol	1157 589	0	NI	0	NR	0	NI	0	0	0	1	1		NI	D	1
			RTECS No			TQ3500000		CAS No:								25322-68-3
Polyethylene glycol dimethyl ether	1158 590	0	NI	0	NR	0	NI	0	0	(1)	1	(1)		NI	D	1
			RTECS No			MC9630000		CAS No:								24991-55-7
Polyethylene polyamines	2367 3131	0	NI	0	NR	3	0	1	0	(3)	2	(3)	S	NI	D	0
			RTECS No					CAS No:								68131-73-7
Polyethylene polyamines (more than 50% C5 -C20 paraffin oil)]	1991 591	(5)	NI	(5)	NR	3	0	0	(1)	(3)	(2)	(3)	S	NI	Fp	0
			RTECS No					CAS No:								
Polyferric sulphate solution	338 592	Inor	0	0	Inorg	(2)	NI	1	(1)	(3)	3	(3)		NI	D	3
			RTECS No					CAS No:								
Polyglycerin, sodium salt solution (containing less than 3% sodium hydroxide)	1874 593	0	NI	0	R	0	NI	0	0	(3)	(2)	3		NI	D	3
			RTECS No					CAS No:								
Polyglycerol	1511 594	NI	NI	NI	NI	NI	NI	0	(0)	(0)	(0)	(0)		NI	D	0
			RTECS No					CAS No:								25618-55-7
Poly(iminoethylene)-graft-N-poly(ethyleneoxy) solution (90% or less)	2287 2537	0	0	0	NR	0	NI	0	0	(1)	0	1		NI	D	1
			RTECS No					CAS No:								68130-99-4
Polyisobutenamine in aliphatic (C10-C14) solvent	2192 2374	0	0	0	NR	2	NI	0	(0)	(2)	2	1		NI	FED	2
			RTECS No					CAS No:								
Polyisobutenyl anhydride adduct	2127 2256	0	NI	0	NR	0	NI	0	0	(1)	0	1		NI	FD	1
			RTECS No					CAS No:								

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Poly(4+)isobutylene	2264 578	0	NI	0	NR	0	NI	(0)	(0)	(0)	(0)	(0)		NI	Fp	2
			RTECS No					CAS No:								629-73-2
Polymethylene polyphenyl isocyanate	1153 595	NI	(2)	(2)	NR	0	0	0	0	(2)	2	2	S	NI	S	2
			RTECS No	TR0350000				CAS No:								9016-87-9
Polyolefin (molecular weight 300+)	1968 596	0	NI	0	NR	0	NI	0	0	0	0	0		NI	Fp	2
			RTECS No					CAS No:								
Polyolefin amide alkeneamine (C17+)	2104 597	5	NI	5	NR	0	NI	0	0	(1)	1	(1)		NI	Fp	2
			RTECS No					CAS No:								
Polyolefin amide alkeneamine borate (C28-C250)	1970 600	0	NI	0	NR	0	NI	0	0	(0)	0	(0)		NI	Fp	2
			RTECS No					CAS No:								
Polyolefin amide alkeneamine/molybdenum oxysulphide mixture	2256 603	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI
			RTECS No					CAS No:								
Polyolefin amide alkeneamine polyol	1989 602	0	NI	0	NI	0	NI	0	0	(0)	0	(0)		NI	NI	0
			RTECS No					CAS No:								
Poly (17+) olefin amine	2049 571	0	NI	0	NR	2	NI	0	(0)	(1)	(1)	(1)		NI	Fp	2
			RTECS No					CAS No:								98761-78-5
Polyolefinamine (C28-C250)	2107 609	0	NI	0	NR	2	NI	0	(0)	(2)	2	(1)		NI	Fp	2
			RTECS No					CAS No:								
Polyolefinamine in alkyl (C2-C4) benzenes	2107 610	0	NI	0	NR	2	NI	0	(0)	(2)	2	(1)		NI	Fp	2
			RTECS No					CAS No:								
Polyolefinamine in aromatic solvent	2107 611	0	NI	0	NR	2	NI	0	(0)	(2)	2	(1)		NI	Fp	2
			RTECS No					CAS No:								
Polyolefin aminoester salts (molecular weight 2000+)	2095 604	0	NI	0	NR	1	NI	0	0	(1)	1	(1)		NI	Fp	2
			RTECS No					CAS No:								
Polyolefin anhydride	1865 605	0	NI	0	NR	1	NI	0	0	(2)	1	(2)		NI	Fp	2
			RTECS No					CAS No:								67762-77-0

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Polyolefin ester (C28-C250)	1969 606	0	NI	0	NR	0	NI	0	0	(0)	0	0		NI	Fp	2
			RTECS No					CAS No:								
Polyolefin phenolic amine (C28-C250)	1980 607	0	NI	0	NI	0	NI	0	0	(1)	(1)	(1)		NI	Fp	2
			RTECS No					CAS No:								
Polyolefin phosphorusulphide, barium derivative (C28-C250)	1976 608	0	NI	0	NI	2	NI	0	(0)	(0)	(0)	(0)		NI	S	0
			RTECS No					CAS No:								
Poly(20)oxyethylene sorbitan monooleate	1442 577	3	NI	3	NI	(3)	NI	0	(0)	(1)	0	1		NI	D	1
			RTECS No	WG2932500				CAS No:						9005-65-6		
Polyoxypropylene diamine	2824	NI	NI		NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI
			RTECS No					CAS No:						9046-10-0		
Polyoxypropylene diamine (mw 2000)	3014	NI	NI		NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI
			RTECS No					CAS No:								
Poly(5+)propylene	1512 579	0	NI	0	NR	(0)	NI	(0)	(0)	(0)	(0)	(0)		NI	F	1
			RTECS No	UD1842000				CAS No:						9003-07-0		
Polypropylene glycol	1159 612	0	NI	0	(NR)	1	NI	1	0	(1)	1	1		NI	D	1
			RTECS No	TR6125000				CAS No:						25322-69-4		
Polysiloxane	1161 613	NI	4	4	NI	2	NI	0	(0)	(0)	0	0		NI	F	1
			RTECS No					CAS No:								
Poly(tetramethylene ether) glycol (mw 600-3000)	2147 2540	2	NI	2	NI	3	NI	0	NI	1	2	1		NI	FD	2
			RTECS No					CAS No:								
Potassium chloride brine	2345 3109	Inor	0	0	Inorg	1	0	0	(0)	(1)	0	0		NI	D	0
			RTECS No					CAS No:						7447-40-7		
Potassium chloride solution (10% or more)	1513 614	Inor	0	0	Inorg	1	0	0	(0)	(1)	0	1		NI	D	0
			RTECS No	TS8050000				CAS No:						7447-40-7		
Potassium formate solutions	2121 615	0	NI	0	R	0	NI	(0)	(0)	(2)	2	2		NI	D	2
			RTECS No	LQ9625000				CAS No:						520-29-4		

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Potassium hydroxide solution	1171 616	Inor	0	0	Inorg	2	NI	2	(2)	(3)	3C	3		NI	D	3
			RTECS No			TT2100000		CAS No:								1310-58-3
Potassium oleate	1497 617	3	NI	3	R	4	NI	(0)	(0)	(1)	1	1		NI	FD	1
			RTECS No			RK1150000		CAS No:								143-18-0
Potassium salt of polyolefin acid	1895 2199	NI	NI	NI	NR	0	NI	0	0	(0)	0	0		NI	NI	0
			RTECS No					CAS No:								
Potassium thiosulphate (50% or less)	2152 2335	Inor	0	0	Inorg	2	NI	0	0	(2)	2	(2)		NI	D	2
			RTECS No					CAS No:								10294-66-3
n-Propanolamine	1183 485	0	NI	0	R	2	NI	0	1	(3)	3	3		NI	D	3
			RTECS No			UA5600000		CAS No:								156-87-6
beta-Propiolactone	1184 142	0	NI	0	R	(2)	NI	2	(2)	4	3B	3	CM	NI	D	3
			RTECS No			RQ7350000		CAS No:								57-57-8
Propionaldehyde	1185 619	0	NI	0	R	2	NI	1	0	1	2	2		NI	DE	2
			RTECS No			UE0350000		CAS No:								123-38-6
Propionic acid	1186 620	0	NI	0	R	2	NI	0	0	(3)	3B	3		NI	D	3
			RTECS No			UE5950000		CAS No:								79-09-4
Propionic anhydride	1187 621	0	NI	0	R	2	NI	0	0	(3)	2	3		NI	FD	3
			RTECS No			UF9100000		CAS No:								123-62-6
Propionitrile	1188 622	0	NI	0	NI	0	NI	3	3	4	1	2	R	NI	D	3
			RTECS No			UF9625000		CAS No:								107-12-0
n-Propyl acetate	1191 487	1	NI	1	R	2	NI	0	0	0	1	1		NI	ED	1
			RTECS No			AJ3675000		CAS No:								109-60-4
n-Propyl alcohol	1180 488	0	NI	0	R	0	NI	1	0	0	1	2	R	NI	D	3
			RTECS No			UH8225000		CAS No:								71-23-8
n-Propylamine	1194 490	0	NI	0	NI	1	NI	2	2	3	3	3		NI	DE	3
			RTECS No			UH9100000		CAS No:								107-10-8

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Propylbenzene	1196 2686	NI	NI		NI	3	NI	NI	NI	NI	NI	NI		(T)	FE	NI
		RTECS No			DA8750000	CAS No:						103-65-1				
Propylbenzene (all isomers)	1197 623	3	2	2	R	3	NI	0	0	0	2	1		NI	FE	2
		RTECS No			GR8575000	CAS No:						98-82-8				
n-Propyl chloride	1198 489	2	NI	2	NI	1	NI	0	NI	NI	NI	NI		NI	FED	2
		RTECS No			TX4400000	CAS No:						540-54-5				
Propylene-Butylene copolymer	1508 633	NI	NI	NI	NI	NI	NI	(0)	(0)	(0)	(0)	(0)		NI	NI	0
		RTECS No			CAS No:											
Propylene carbonate	2056 624	0	NI	0	R	0	NI	0	0	(3)	2	3		NI	D	3
		RTECS No			FF9650000	CAS No:						108-32-7				
Propylene dimer	1201 625	3	NI	3	R	3	NI	NI	NI	NI	NI	NI		NI	E	2
		RTECS No			CAS No:											
Propylene glycol	1202 626	0	NI	0	R	0	0	0	0	(1)	0	1		NI	D	1
		RTECS No			TY2000000	CAS No:						57-55-6				
Propylene glycol methyl ether acetate	1759 627	0	NI	0	NR	1	NI	0	0	0	0	1		NI	D	1
		RTECS No			AI8925000	CAS No:						108-65-6				
Propylene glycol monoalkyl ether	1958 628	0	NI	0	NR	0	NI	0	1	0	2	3		NI	D	3
		RTECS No			CAS No:						111-35-3					
Propylene glycol phenyl ether	2057 629	1	NI	1	NI	1	NI	0	0	(1)	(1)	(1)		NI	SD	1
		RTECS No			UB8886000	CAS No:										
Propylene oxide	76 630	0	NI	0	R	2	NI	1	1	2	2	3	CMR	NI	DE	3
		RTECS No			TZ2975000	CAS No:						75-56-9				
Propylene tetramer	2255 631	4	NI	4	NR	(4)	NI	(0)	(0)	(1)	(1)	(1)		NI	F	1
		RTECS No			CAS No:						6842-15-5					
Propylene trimer	1207 632	5	4	4	NR	3	2	(0)	(0)	(1)	(1)	(1)		NI	FE	2
		RTECS No			UD2794000	CAS No:						13987-01-4				

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Pyridine	1213 634	0	NI	0	R	3	0	1	1	2	1	3		NT	D	3
			RTECS No			UR8400000		CAS No:								110-86-1
Pyrolysis gasoline (containing benzene)	2271 1990	(4)	(3)	(3)	(R)	(3)	(1)	1	0	(2)	2	2	TCM	NI	FE	3
			RTECS No					CAS No:								
Rapeseed oil	2315 3045	0	NI	0	R	(2)	NI	(0)	(0)	(0)	(1)	(1)		Ni	Fp	2
			RTECS No					CAS No:								
Rape seed oil fatty acid methyl esters	2209 2576	0	0	0	R	0	NI	0	(0)	(1)	1	1		NI	Fp	2
			RTECS No					CAS No:								67762-38-3
Rice bran oil	2312 3043	(0)	NI	(0)	(R)	(0)	NI	0	(0)	(1)	0	1		NI	Fp	2
			RTECS No					CAS No:								68553-81-1
Rosin	1219 635	3	NI	3	NR	3	NI	0	0	2	(1)	1	S	NI	S	2
			RTECS No					CAS No:								8050-09-7
Rosin soap (disproportionated) solution	1220 636	3	NI	3	NR	3	NI	0	NI	NI	NI	NI		NI	S	NI
			RTECS No					CAS No:								
Safflower oil	1222 3041	(0)	NI	(0)	(R)	(0)	NI	(0)	(0)	(1)	1	1		0	Fp	2
			RTECS No			VN2230000		CAS No:								
Shea butter	2311 3042	(0)	NI	(0)	NR	(0)	NI	(0)	(0)	(1)	(0)	(1)		NI	Fp	2
			RTECS No					CAS No:								91080-23-8
Sodium acetate solutions	1498 639	0	NI	0	R	0	NI	0	0	0	1	1		NI	D	1
			RTECS No			AJ4375000		CAS No:								127-09-3
Sodium alkyl (C14-C17) sulphonates (60-65% solution)	334 1153	2	2	2	R	3	1	0	0	(2)	2	2		NI	D	2
			RTECS No					CAS No:								85711-69-9
Sodium aluminate solution	1234 641	Inor	0	0	Inorg	NI	NI	(0)	(0)	(3)	(3)	(3)		NI	D	3
			RTECS No			BD1600000		CAS No:								11138-49-1
Sodium aluminosilicate slurry	1235 643	Inor	0	0	Inorg	1	0	0	0	0	1	1		NI	S	1
			RTECS No					CAS No:								1344-00-9

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Sodium benzoate	1475 644	0	NI	0	R	1	NI	0	(0)	(1)	0	1		NI	D	1
			RTECS No													532-32-1
Sodium borohydride (15% or less)/Sodium hydroxide solution	1239 645	Inor 0	0	Inorg	2	NI	(2)	(1)	(3)	(3)	(3)			NI	D	3
			RTECS No													CAS No:
Sodium carbonate solution	1243 646	Inor 0	0	Inorg	1	NI	0	0	3	1	2			NI	SD	2
			RTECS No													CAS No:
Sodium chlorate solution (50% or less)	1244 647	Inor 0	0	Inorg	1	NI	1	0	(2)	1	1	S		NI	D	2
			RTECS No													CAS No:
Sodium dichromate solution (70% or less)	487 649	Inor 0	0	Inorg	2	1	2	2	4	2	3	CMS		NI	D	3
			RTECS No													CAS No:
Sodium hydrogen sulphide (6% or less)/Sodium carbonate (3% or less) solution	2262 650	Inor NI	Inorg	Inorg	1	NI	0	0	0	0	1			NI	D	1
			RTECS No													CAS No:
Sodium hydrogen sulphite solution (45% or less)	1251 651	Inor 0	0	Inorg	1	NI	0	(0)	(0)	0	0			NI	D	0
			RTECS No													CAS No:
Sodium hydrosulphide/Ammonium sulphide solution	1253 653	Inor 0	0	Inorg	3	NI	1	1	0	2	2			NI	D	2
			RTECS No													CAS No:
Sodium hydrosulphide solution (45% or less)	1252 652	Inor 0	0	Inorg	1	NI	1	1	1	2	2			NI	D	2
			RTECS No													CAS No:
Sodium hydroxide solution	1254 654	Inor 0	0	Inorg	2	NI	1	1	(3)	3C	3			NI	D	3
			RTECS No													CAS No:
Sodium hypochlorite solution (15% or less)	1256 2785	Inor 0	0	Inorg	(4)	(1)	0	0	1	3	3	S		NI	D	3
			RTECS No													CAS No:
Sodium hypochlorite solution (Full strength solution)	1255 655	Inor 0	0	Inorg	5	2	0	0	1	3	3	S		NI	D	3
			RTECS No													CAS No:
Sodium nitrate	1259 656	Inor 0	0	Inorg	0	NI	(0)	(0)	(0)	(1)	(1)			NI	SD	1
			RTECS No													CAS No:

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Sodium nitrite (solid)	340	Inor	0	0	Inorg	3	0	2	(2)	2	0	1		NI	SD	2
	657	RTECS No			RA1225000	CAS No:						7632-00-0				
Sodium nitrite solution	340	Inor	0	0	Inorg	3	0	2	(2)	2	0	1		NI	SD	2
	658	RTECS No			RA1225000	CAS No:						7632-00-0				
Sodium perborate monohydrate	2284	Inor	NI	NI	Inorg	3	NI	1	0	(3)	2	3		NI	NI	3
	2948	RTECS No				CAS No:						11138-47-9				
Sodium petroleum sulphonate	1860	0	NI	0	(NR)	2	NI	0	(0)	(2)	1	2	S	NI	S	2
	660	RTECS No				CAS No:						68608-26-4				
Sodium poly(4+)acrylate solutions	1487	0	NI	0	NR	1	0	0	(0)	(1)	1	1		NI	D	1
	826	RTECS No				CAS No:						9003-04-7				
Sodium silicate solution	1262	Inor	0	0	Inorg	2	NI	1	0	(3)	3	3		NI	D	3
	661	RTECS No				CAS No:						1344-09-8				
Sodium sulphate solutions	1499	Inor	0	0	Inorg	0	0	0	(0)	(1)	1	1		NI	SD	1
	662	RTECS No			WE1650000	CAS No:						7757-82-6				
Sodium sulphide (solid)	2263	NI	NI		NI	NI	NI	NI	NI	NI	NI	NI		NI	SD	NI
	2786	RTECS No				CAS No:						1313-82-2				
Sodium sulphide solution (15% or less)	1263	Inor	0	0	Inorg	3	NI	1	1	(3)	3A	3		NI	D	3
	663	RTECS No			WE1905000	CAS No:						1313-82-2				
Sodium sulphite solution (25% or less)	9	Inor	0	0	Inorg	2	NI	0	(0)	(1)	0	1		NI	D	1
	664	RTECS No			WE2150000	CAS No:						7757-83-7				
Sodium tartrates/Sodium succinates solution	1771	NI	1	1	NI	1	NI	0	NI	NI	NI	NI		NI	D	NI
	665	RTECS No				CAS No:										
Sodium thiocyanate solution (56% or less)	1264	Inor	0	0	Inorg	2	NI	1	(0)	(1)	0	0		NI	D	1
	667	RTECS No			XL2275000	CAS No:						540-72-7				
Sorbitol solution	1265	0	NI	0	R	0	NI	0	(0)	(0)	(0)	(0)		NI	D	0
	668	RTECS No			LZ4290000	CAS No:						50-70-4				

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Soyabean oil	2320	0	NI	0	R	0	NI	0	(0)	(1)	(0)	1		NI	Fp	2
	3050	RTECS No					CAS No:									
Soyabean oil (containing less than 0.5% free fatty acids)	1267	0	NI	0	R	0	NI	0	(0)	(1)	(0)	1		NI	Fp	2
	2770	RTECS No WG4862000					CAS No:					8001-22-7				
Styrene monomer	1273	3	(2)	3	R	3	NI	1	0	2	2	2	CM	NI	FE	3
	669	RTECS No WL3675000					CAS No:					100-42-5				
Sulphohydrocarbon (C3-C88)	1972	4	NI	4	NR	2	NI	0	0	0	0	0		NI	Fp	2
	672	RTECS No					CAS No:					68511-50-2				
Sulpho hydrocarbon long chain (C18+) alkylamine mixture	2003	NI	NI	NI	NI	3	NI	0	0	(2)	2	2		NI	S	2
	670	RTECS No					CAS No:									
Sulpholane	1277	0	1	1	NR	2	0	1	0	0	1	2		NI	SD	2
	673	RTECS No XN0700000					CAS No:					126-33-0				
Sulphonated polyacrylate solution	1760	NI	0	0	NI	0	NI	(0)	(0)	(0)	(0)	(0)		NI	D	0
	674	RTECS No					CAS No:									
Sulphur (molten)	906	Inor	0	0	Inorg	0	NI	0	0	(1)	1	1		NI	S	1
	675	RTECS No WS4250000					CAS No:					7704-34-9				
Sulphuric acid	1280	Inor	NI	Inorg	Inorg	2	NI	(3)	(3)	4	3C	3	C	NI	D	3
	676	RTECS No WS5600000					CAS No:					7664-93-9				
Sulphuric acid, spent	1280	Inor	NI	Inorg	Inorg	2	NI	(3)	(3)	4	3C	3	C	NI	D	3
	677	RTECS No WS5600000					CAS No:					7664-93-9				
Sulphurized fat (C14-C20)	1853	0	NI	0	NR	1	NI	0	(0)	(1)	0	(1)		NI	FD	1
	2257	RTECS No					CAS No:									
Sulphurized polyolefinamide alkene (C28-C250) amine	1855	0	NI	0	NR	0	NI	0	0	(0)	0	0		NI	FD	0
	2258	RTECS No					CAS No:									
Sunflower seed oil	1283	0	NI	0	R	0	NI	(0)	(0)	(1)	(0)	(1)		NI	Fp	2
	2782	RTECS No					CAS No:					8000-21-6				

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Tall oil (crude and distilled)	1285 678	(4)	NI	(4)	(R)	(2)	NI	0	0	(0)	0	0	S	NI	Fp	2
			RTECS No					CAS No:								8002-26-4
Tall oil crude	2357 3118	4	NI	4	R	2	NI	0	0	(0)	0	0	S	NI	Fp	2
			RTECS No					CAS No:								8002-26-4
Tall oil distilled	2283 2890	0	NI	0	R	0	NI	0	(0)	(0)	0	(0)		NI	Fp	2
			RTECS No					CAS No:								8002-26-4
Tall oil fatty acid (resin acids less than 20%)	1287 679	0	0	0	R	0	NI	0	0	(1)	1	1		NI	Fp	2
			RTECS No					CAS No:								61790-12-3
Tall oil fatty acid, barium salt	1864 680	NI	NI	NI	NI	NI	NI	(1)	(0)	(2)	1	2		NI	S	2
			RTECS No					CAS No:								
Tall oil pitch	2323 3051	3	NI	3	NR	0	NI	0	0	(0)	0	(0)	S	NI	Fp	2
			RTECS No					CAS No:								8016-81-7
Tall oil soap (disproportionated) solution	1286 681	NI	NI	NI	NI	NI	NI	(1)	(0)	(2)	1	2		NI	D	2
			RTECS No					CAS No:								
Tallow	1288 682	0	NI	0	R	0	NI	0	0	(0)	(0)	(0)		NI	Fp	2
			RTECS No					CAS No:								61789-21-6
Tallow fatty acid	1289 684	0	NI	0	R	0	NI	0	(0)	(0)	(0)	(0)		NI	Fp	2
			RTECS No					CAS No:								6170-37-2
Tetrachloroethane	53 687	2	2	2	NR	3	0	2	0	2	2	2	MN	NI	SD	3
			RTECS No			KI8575000		CAS No:								79-34-5
Tetraethylene glycol	1301 688	0	NI	0	NR	0	NI	0	0	0	1	1		NI	D	1
			RTECS No			XC2100000		CAS No:								112-60-7
Tetraethylene pentamine	1302 689	0	NI	0	NR	3	NI	0	2	(3)	3	3	S	NI	D	3
			RTECS No			KH8585000		CAS No:								112-57-2
Tetraethyl silicate monomer/oligomer (20% in ethanol)	2198 2475	0	0	0	R	0	0	0	0	0	1	2		NI	DE	2
			RTECS No					CAS No:								78-10-4

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Tetrahydrofuran	1304 690	0	NI	0	R	0	NI	0	(0)	0	1	2		NI	DE	2
			RTECS No					CAS No:								109-99-9
Tetrahydronaphthalene	1305 691	3	3	3	NR	3	NI	0	0	(2)	2	0		NI	F	2
			RTECS No					CAS No:								119-64-2
Tetramethylbenzene (all isomers)	1307 692	4	NI	4	NI	4	NI	0	(0)	(1)	1	(1)		NI	F	1
			RTECS No					CAS No:								488-23-3
Thixatrol Plus	2210 2699	5	NI	5	R	3	NI	0	0	0	1	1		NI	S	1
			RTECS No					CAS No:								
Titanium dioxide slurry	2080 2259	Inor	1	1	Inorg	1	NI	0	0	0	1	1		NI	NI	1
			RTECS No					CAS No:								1317-80-2
Toluene	330 693	2	2	2	R	3	0	0	0	0	2	2	ANR	NT	E	3
			RTECS No					CAS No:								108-88-3
Toluenediamine	1317 695	0	2	2	NR	3	0	2	2	4	1	2	CMS	NI	Fp	3
			RTECS No					CAS No:								95-80-7
Toluene diisocyanate	1315 694	(3)	1	1	NR	2	NI	0	(0)	4	3	3	SCL	NI	S	3
			RTECS No					CAS No:								584-84-9
o-Toluidine	1316 537	1	1	1	R	4	2	1	0	(2)	2	2	CM	NI	FD	3
			RTECS No					CAS No:								
Tolyl triazole	2292 696	1	NI	1	NR	2	0	1	0	(2)	(1)	2		NI	S	2
			RTECS No					CAS No:								29385-43-1
Tributyl phosphate	1319 697	4	2	2	R	3	0	1	0	2	2	2	S	NI	F	3
			RTECS No					CAS No:								126-73-8
1,2,3-Trichlorobenzene (molten)	2191 2288	4	4	4	NR	4	2	1	0	(2)	2	2		NI	S	2
			RTECS No					CAS No:								87-61-6
1,2,4-Trichlorobenzene	1323 7	4	5	5	NR	4	1	1	0	(2)	2	2	M	NI	S	3
			RTECS No					CAS No:								120-82-1

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
1,1,1-Trichloroethane	1326	2	NI	2	NR	2	NI	0	0	0	2	2		NI	SD	2
	1	RTECS No KJ2975000			CAS No:			71-55-6								
1,1,2-Trichloroethane	1327	2	1	1	NR	2	0	1	0	1	2	1		NI	SD	2
	3	RTECS No KJ3150000			CAS No:			79-00-5								
Trichloroethylene	329	2	2	2	NR	3	NI	0	0	0	2	2	CM	NI	SD	3
	698	RTECS No KX4550000			CAS No:			79-01-6								
1,2,3-Trichloropropane	1329	2	2	2	NR	2	0	2	2	3	2	2	C	NI	SD	3
	6	RTECS No TZ9275000			CAS No:			96-18-4								
1,1,2-Trichloro-1,2,2-Trifluoroethane	1330	3	2	2	NR	3	0	0	0	0	1	1		NI	S	1
	2	RTECS No KJ4000000			CAS No:			76-13-1								
Tricresyl phosphate (containing 1% or more ortho-isomer)	1332	5	3	3	R	4	4	0	1	0	1	1	N	NI	S	2
	699	RTECS No TD0175000			CAS No:			1330-78-5								
Tricresyl phosphate (containing less than 1% ortho-isomer)	1331	5	(3)	(3)	(R)	(4)	(4)	0	1	0	1	1	N	NI	S	2
	700	RTECS No TD0175000			CAS No:			1330-78-5								
Tridecane	1333	0	NI	0	NI	0	NI	0	0	(1)	1	0		NI	Fp	2
	701	RTECS No YD3025000			CAS No:			629-50-5								
Tridecanoic acid	1334	5	NI	5	(R)	3	NI	(0)	(0)	(1)	(1)	(1)		NI	Fp	2
	702	RTECS No YD3850000			CAS No:			638-53-9								
Tridecyl acetate	1768	5	NI	5	NI	0	NI	0	(0)	(2)	2	2		NI	F	2
	703	RTECS No			CAS No:			1072-33-9								
Triethanolamine	1338	0	0	0	R	1	NI	0	0	(2)	1	2		NI	D	2
	704	RTECS No KL9275000			CAS No:			102-71-6								
Triethylamine	1339	1	0	0	R	3	0	1	2	2	2	3		NI	D	3
	706	RTECS No YE0175000			CAS No:			121-44-8								
Triethylbenzene	1340	5	NI	5	NI	4	NI	0	(0)	(2)	(2)	(1)		NI	F	2
	707	RTECS No DC2490000			CAS No:			25340-18-5								

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Triethylene glycol	1341 708	0	NI	0	R	0	0	0	0	(1)	1	1		NI	D	1
			RTECS No	YE4550000				CAS No:								112-27-6
Triethylenetetramine	1346 709	0	NI	0	NR	3	NI	0	2	(3)	3	3	S	NI	D	3
			RTECS No	YE6650000				CAS No:								112-24-3
Triethyl phosphate	1348 705	0	0	0	NR	1	0	1	0	0	(2)	(2)		NI	D	2
			RTECS No	TC7900000				CAS No:								78-40-0
Triethylphosphite	1349 710	0	NI	0	R	1	NI	1	0	2	1	2	S	NI	FE	2
			RTECS No	TH1130000				CAS No:								122-52-1
Triisopropanolamine	1370 711	0	0	0	NR	1	0	1	0	0	(2)	3		NI	FD	3
			RTECS No	UB8750000				CAS No:								122-20-3
Triisopropylated phenyl phosphates	1375 712	5	5	5	R	4	NI	0	0	0	0	0		NI	S	0
			RTECS No					CAS No:								68937-41-7
Trimethylacetic acid	1350 714	1	1	1	R	2	NI	1	1	(2)	2	2		NI	Fp	2
			RTECS No	TO7700000				CAS No:								75-98-9
Trimethylamine solution (30% or less)	1353 715	0	NI	0	R	1	NI	1	0	2	3	3		NI	DE	3
			RTECS No	PA0350000				CAS No:								75-50-3
Trimethylbenzene (all isomers)	1354 716	3	3	3	NR	4	0	0	0	1	2	1		NI	FE	2
			RTECS No	DC3300000				CAS No:								526-73-8
Trimethylhexamethylenediamine (2,2,4- and 2,4,4-isomers)	1359 718	1	NI	1	NI	NI	NI	1	0	(3)	2	3	S	NI	D	3
			RTECS No	MO1451000				CAS No:								26520-58-0
Trimethylhexamethylene diisocyanate (2,2,4- and 2,4,4-isomers)	1360 717	0	NI	0	NI	3	NI	0	NI	NI	NI	NI	S	NI	NI	2
			RTECS No	MO1760000				CAS No:								28679-16-5
Trimethylolpropane polyethoxylate	1362 719	NI	NI	NI	NR	1	NI	0	0	NI	NI	NI		NI	NI	0NI
			RTECS No					CAS No:								25723-16-4
Trimethylol propane propoxylated	2274 2870	0	NI	0	(NR)	1	0	0	0	(1)	0	1		NI	SD	1
			RTECS No					CAS No:								25723-16-4

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
2,2,4-Trimethyl-1,3-pentanediol diisobutyrate	1845 26	4	NI	4	NI	0	NI	0	0	(1)	1	0		NI	F	1
			RTECS No					CAS No:						6846-50-0		
2,2,4-Trimethyl-1,3-pentanediol-1-isobutyrate	1364 27	3	NI	3	NI	2	NI	0	0	(1)	1	1		NI	Fp	2
			RTECS No	UF6000000				CAS No:						25265-77-4		
Trimethyl phosphite	1365 713	0	NI	0	R	NI	NI	NI	NI	NI	NI	NI		NI	S	NI
			RTECS No	TH1400000				CAS No:						121-45-9		
1,3,5-Trioxane	1844 10	0	NI	0	NI	0	NI	0	0	0	0	1	R	NI	SD	3
			RTECS No	YK0350000				CAS No:						110-88-3		
Tripropylene glycol	1372 720	0	0	0	NR	0	NI	0	0	(0)	0	0		NI	D	0
			RTECS No	YK6825000				CAS No:						24800-44-0		
Trixylyl phosphate	1377 721	5	4	4	NR	4	1	(0)	(1)	(2)	(1)	(1)		NI	S	2
			RTECS No	ZE8320000				CAS No:						25155-23-1		
Tung oil	1378 2784	0	NI	0	R	(2)	NI	(0)	(0)	(1)	(0)	(1)		NI	Fp	2
			RTECS No					CAS No:						8001-20-5		
Turpentine	1379 722	4	NI	4	NI	4	NI	0	(0)	1	(2)	2	AS	(T)	D	2
			RTECS No	YO8400000				CAS No:						8006-64-2		
Undecanoic acid	1381 723	4	NI	4	(R)	3	NI	(0)	(0)	(2)	1	(2)		NI	Fp	2
			RTECS No	YQ2275000				CAS No:						112-37-8		
1-Undecene	1383 24	5	NI	5	NR	4	NI	(0)	(0)	(1)	(1)	(1)		NI	F	1
			RTECS No					CAS No:						821-95-4		
Undecyl alcohol	1382 724	4	NI	4	R	4	NI	0	0	(2)	2	(1)		NI	Fp	2
			RTECS No	YQ3155000				CAS No:						112-42-5		
Urea	1384 2627	0	0	0	R	1	NI	0	0	(1)	1	(1)		NI	D	1
			RTECS No	YR6250000				CAS No:								
Urea/Ammonium mono- and di-hydrogen phosphate/Potassium chloride solution	1386 727	0	0	0	R	3	2	NI	NI	NI	NI	NI		NI	NI	NI
			RTECS No					CAS No:								

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Urea/Ammonium nitrate solution	2322 728	Inor	NI	Inorg	R	1	NI	0	0	(2)	1	2		NI	D	2
		RTECS No						CAS No:								
Urea/Ammonium nitrate solution (containing less than 1% free ammonia)	1387 729	Inor	NI	Inorg	R	3	2	0	0	(2)	1	2		NI	D	2
		RTECS No						CAS No:								
Urea/Ammonium phosphate solution	2179 730	0	0	0	R	3	2	(0)	(0)	(2)	(2)	(2)		NI	D	2
		RTECS No						CAS No:								
Urea formaldehyde resin solution	1388 725	NI	NI	NI	NI	1	NI	1	1	NI	NI	NI	S	NI	NI	2
		RTECS No						CAS No:								
Urea solution	1384 726	0	0	0	R	1	NI	0	0	(1)	1	(1)		NI	D	1
		RTECS No			YR6250000			CAS No:			57-13-6					
Valeraldehyde (all isomers)	1390 731	1	NI	1	R	3	NI	0	0	0	2	2		NI	D	2
		RTECS No			ES3450000			CAS No:			590-86-3					
Vegetable acid oils (n.o.s.)	2371 3138	0	NI	0	R	0	NI	(0)	(0)	(1)	(1)	(1)		NI	Fp	2
		RTECS No						CAS No:								
Vegetable oils fatty acid distillates (n.o.s.)	2369 3137	0	NI	0	R	0	NI	(0)	(0)	(0)	(0)	(0)		NI	Fp	2
		RTECS No						CAS No:								
Vegetable protein solution (hydrolysed)	1398 734	0	NI	0	R	0	NI	(0)	(0)	(0)	(0)	(0)		NI	D	0
		RTECS No						CAS No:								
Vinyl acetate	1400 735	0	NI	0	R	2	NI	1	0	2	1	1	C	NI	ED	3
		RTECS No			AK0875000			CAS No:			108-05-4					
Vinyl ethyl ether	1405 736	1	NI	1	NR	1	NI	0	0	0	1	1		NI	E	2
		RTECS No			KO0710000			CAS No:			109-92-2					
Vinylidene chloride	1406 738	2	1	1	NR	2	NI	2	0	(2)	2	2	M	NI	SD	3
		RTECS No			KV9275000			CAS No:			75-35-4					
Vinyl neodecanoate	1404 737	5	NI	5	NR	3	NI	0	0	(3)	3	3		NI	F	3
		RTECS No						CAS No:			45115-34-2					

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Vinyltoluene	1409 739	3	3	3	NR	3	NI	0	0	2	2	1	NM	(T)	F	3
		RTECS No			WL5075000			CAS No:						25013-15-4		
Water	494 740	0	0	0	Inorg	0	0	0	0	0	0	0		NI	D	0
		RTECS No						CAS No:						7732-18-5		
Waxes	1122 741	0	NI	0	NR	0	NI	0	0	(0)	0	0		NI	Fp	2
		RTECS No			RV0350000			CAS No:						8002-74-2		
White spirit, low (15-20%) aromatic	1411 742	(4)	NI	(4)	(R)	3	NI	(0)	(0)	(2)	(1)	(2)	A	NI	F	3
		RTECS No						CAS No:								
Xylenes	1408 743	3	NI	3	NR	3	0	0	0	0	2	2		(T)	FE	2
		RTECS No			ZE2275000			CAS No:						1330-20-7		
Xylenes/ethylbenzene (10% or more) mixture	2269 2337	3	2	2	NR	3	1	(0)	(0)	(2)	(2)	(2)		(T)	FE	2
		RTECS No						CAS No:								
Xylenol	1422 744	2	NI	2	R	3	NI	1	2	(3)	3	3		(T)	Fp	3
		RTECS No			ZE5425000			CAS No:						1300-71-6		
Zinc alkaryl dithiophosphate (C7-C16)	1977 745	0	NI	0	NR	3	NI	0	0	(0)	(0)	(0)		NI	Fp	2
		RTECS No						CAS No:								
Zinc alkenyl carboxamide	2053 746	NI	0	0	NR	0	NI	0	0	(1)	1	(1)		NI	Fp	2
		RTECS No						CAS No:						85137-07-1		
Zinc alkyl dithiophosphate (C3-C14)	1428 747	5	NI	5	NR	3	NI	0	0	0	2	2		NI	S	2
		RTECS No						CAS No:								
Zinc bromide solutions	2227 2617	Inor	4	4	Inorg	3	NI	1	(2)	(3)	3B	3	S	NI	D	3
		RTECS No						CAS No:								
Zinc chloride	1425 2869	Inor	4	4	Inorg	4	1	(1)	(1)	(3)	(3)	(3)		NI	D	3
		RTECS No			ZH1400000			CAS No:								

ANNEX 5

**EVALUATION OF PRODUCTS IN THE IBC CODE BASED ON CORRESPONDENCE
RELATED TO MISSING DATA FOR PRODUCTS WHICH WERE
SUBMITTED BY 31 DECEMBER 2005**

**Re-evaluation of products omitted from the IBC Code due to missing data
(MSC/Circ. 1128 - MEPC/Circ.423) following receipt of additional information**

IBC Code Name	EHS	A1	A2	B1	B2	C1	C2	C3	D3	E2
Alkyl(C8+)amine, Alkenyl (C12+) acid ester mixture	1433	NI	NI	1	NI	(0)	(0)	NI	S	Fp
Alkyl (C12+) dimethylamine	2248	3	R	5	2	1	(1)	(3)		F
Ammonium polyphosphate solution	1764	0	Inorg	1	NI	0	0	0		D
Cashew nut shell oil (untreated)	443	0	R	0	NI	(0)	(0)	(2)	S	Fp
Coal tar pitch (molten)	491	(3)	NR	4	2	0	0	(1)	CM	S
1,6-Dichlorohexane	593	3	NR	3	NI	0	(0)	(0)		S
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution	602	0	R	2	NI	1	0	(3)		D
Diethylene glycol diethyl ether	630	0	NR	0	NI	1	0	(2)		D
Dodecylamine/Tetradecylamine mixture	721	3	R	4	NI	1	0	(3)		F
Ethyl acrylate	734	1	R	3	1	1	2	2	SC	ED
Ethylene-Vinyl acetate copolymer (emulsion)	779	1	NR	0	0	0	(0)	(2)		S
Fluorosilicic acid (20-30%) in water solution	2240	0	Inorg	2	NI	(1)	(1)	4		D
1,6-Hexanediol, distillation overheads	2143	4	NR	2	NI	0	0	2		FED
Latex, ammonia (1% or less), inhibited	889	0	R	(2)	NI	0	0	(1)		D
Palm kernel acid oil	1095	0	R	(3)	NI	0	0	(2)		Fp
1,3-Pentadiene	1102	2	NI	2	NI	0	0	0		E
Polyether (molecular weight 2000+)	1975	0	NR	1	NI	0	(0)	(0)		Fp
Polyethylene polyamines	2367	0	NR	3	0	1	0	(3)	S	D
Polyethylene polyamines (more than 50% C5 -C20 paraffin oil)]	1991	(5)	NR	3	0	0	(1)	(3)	S	Fp
Pyridine	1213	0	R	3	0	1	1	2		D
Tall oil (crude and distilled)	1285	(4)	(R)	(2)	NI	0	0	(0)	S	Fp
Vegetable protein solution (hydrolysed)	1398	0	R	0	NI	(0)	(0)	(0)		D
Vinyl ethyl ether	1405	1	NR	1	NI	0	0	0		E

ANNEX 6

**INCONSISTENCIES BETWEEN HAZARD PROFILES AND
IBC CODE TRANSPORT REQUIREMENTS**

EHS	PRODUCT NAME	COMMENT
2203	Iso- & cyclo-alkanes (C10-C11)	F by analogy with n-alkanes (C10+) (EHS 296)
2204	Iso- & cyclo-alkanes (C12+)	E2 remains NI
296	n-alkanes (C10+)	E2 = F (confirmed)
299	Alkyl acrylate-vinylpyridine copolymer in toluene	E2 = F/Fp (confirmed)
1783	Alkyl (C9+) benzenes	E2 = F
1981	Alkyldithiothiadiazole (C6-C24)	E2 = S
2097	Calcium long chain alkyl (C11-C40) phenate	E2 = Fp
1616	Dimethyl sulphide	E2 = SD
2116	Dodecyl/octadecyl methacrylate mixture	E2 = Fp
731	Epichlorohydrin	E2 = D
408	Isobutyl methacrylate	E2 = FED
421	Long chain alkaryl polyether (C11-C20)	E2 = Fp
1074	Octanoic acid (all isomers)	E2 = F
1071	Octyl aldehydes	E2 = F
1148	Pine oil	E2 = Fp
1760	Sulphonated polyacrylate solution	E2 = D
1768	Tridecyl acetate	E2 = F (confirmed)
1845	2,2,4-trimethyl-1,3-pentanediol-1-isobutyrate	E2 = F (confirmed)
1398	Vegetable protein solution (hydrolysed)	E2 = D

ANNEX 7

**DRAFT AGENDA FOR THE FORTY-FOURTH SESSION OF
THE GESAMP/EHS WORKING GROUP**

- 1 Adoption of the agenda
 - Matters arising from IMO and other Organizations relevant to the activities of the Working Group
 - 2 Evaluation of new substances proposed for bulk transport by ships
 - 3 Correspondence with the industry and consideration of queries from industry related to evaluations
 - 4 Any other business
 - 5 Future work programme and dates of the following sessions
 - 6 Consideration and adoption of the report
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