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4 July 2006

## **HAZARD EVALUATION OF SUBSTANCES TRANSPORTED BY SHIPS**

### **Report of the forty-third session of the GESAMP Working Group on the Evaluation of the Hazards of Harmful Substances Carried by Ships**

The report of the forty-third session of the GESAMP Working Group on the Evaluation of the Hazards of Harmful Substances Carried by Ships (EHS 43/10) is attached for information.

Any comments would be welcome and should be addressed to:

IMO Technical Secretary of the GESAMP/EHS Working Group  
Marine Environment Division  
4 Albert Embankment  
London SE1 7SR  
United Kingdom

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## 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	Inorganic substance
Inorg, NR	

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 “Interestesterified 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 "Interestesterified 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<sup>1, 2</sup>;
- .2 Fatty acids, linear, C12+ saturated with C12+ unsaturated<sup>2</sup>;
- .3 Fatty acids, linear, C8-C18, saturated with C18 unsaturated<sup>2</sup>;
- .4 Fatty acids, saturated, linear, C12+<sup>2</sup>;
- .5 Fatty acids, unsaturated, linear, C16+<sup>2</sup>;
- .6 Fatty acid (saturated, C13+) <sup>1, 2</sup>;
- .7 Palm kernel oil fatty acid;
- .8 Tallow fatty acid<sup>1, 2</sup>;
- .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+.

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<sup>1</sup> Entry classified by the ESPH Working Group under the amended IBC Code.

<sup>2</sup> 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 refining<sup>1</sup>;
- .3 Palm acid oil<sup>1</sup>;
- .4 Palm kernel acid oil<sup>1</sup>;
- .5 Soyabean acid oil;
- .6 Sunflower seed acid oil; and
- .7 Rapeseed acid oil.

#### *Vegetable Oil Distillates*

- .1 Palm fatty acid distillate<sup>1</sup>;
- .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.

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<sup>1</sup> 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+)<sup>1,2</sup>;
- .2 Alcohols (C8-C11), primary, linear and essentially linear<sup>2</sup>;
- .3 Alcohols (C12-C13), primary, linear and essentially linear<sup>2</sup>;
- .4 Alcohols (C14-C18), primary, linear and essentially linear<sup>2</sup>;
- .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.

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<sup>1</sup> Entry classified by the ESPH Working Group under the amended IBC Code.

<sup>2</sup> 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(C<sub>9</sub>-C<sub>10</sub>) phthalates

3.33 The Group completed the hazard profile for Dialky (C<sub>9</sub>-C<sub>10</sub>) 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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\* Technical Secretary of the GESAMP/EHS Working Group  
International Maritime Organization  
4 Albert Embankment, London SE1 7SR  
United Kingdom  
Tel: +44 (0)20 7735 7611  
Fax: +44(0)20 7587 3210  
E-mail: [smicallef@imo.org](mailto:smicallef@imo.org)



**ANNEX 1**

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

**Dr. C.T. Bowmer (Chairman)**

TONO Chemistry

Utrechtseweg 48

PostBox 360

3700 AJ Zeist

The Netherlands

E-mail: [bowmer@voeding.tno.nl](mailto:bowmer@voeding.tno.nl)

Tel: +31 30 6944645

Fax: +31 30 6944099

**Dr. T. Höfer**

Federal Institute for Risk Assessment

Thielallee 88-92

D-14195 Berlin

Germany

E-mail: [thomas.hoefer@bfr.bund.de](mailto:thomas.hoefer@bfr.bund.de)

Tel: +49 308 412 3267

Fax: +49 308 412 3685

**Dr. D. James**

Ty Llwyd

Llanwrda

Carmarthenshire

Wales SA19 8AW

E-mail: [derek-a.james@virgin.net](mailto:derek-a.james@virgin.net)

Tel: +44 1550 779034

**Dr. M. Marchand**

IFREMER

Centre de Nantes

BP 21105

44311-Nantes

France

E-mail: [mmarchan@ifremer.fr](mailto:mmarchan@ifremer.fr)

Tel: +33 02 4037 4142

Fax: +33 02 4037 4001

**Mr. M. Morrissette**

President

Dangerous Goods Advisory Council

Suite 740

1100 H Street, NW

Washington, D.C. 20005

United States

E-mail: [mmorrissette@dgac.org](mailto:mmorrissette@dgac.org)

Tel: +1 202 289 4550

Fax: +1 202 289 4074

**Prof. T. Syversen**

Norwegian University of Science and Technology

Faculty of Medicine

Department of Neuroscience

Medisinsk Teknisk Senter

N-7489 Trondheim

Norway

E-mail: [tore.syversen@medisin.ntnu.no](mailto:tore.syversen@medisin.ntnu.no)

Tel: +47 73 59 88 48

Fax: +47 73 59 68 79

Prof M. Wakabayashi  
Shukutoku University  
1150-1 Fujikubo  
Miyoshi-machi  
Iruma-gun 354-8510  
Saitama-Pref  
Japan

E-mail: [mwak@ccb.shukutoku.ac.jp](mailto:mwak@ccb.shukutoku.ac.jp)  
Tel: +81 49 274 1511  
Fax: +81 49 274 1521

## **IMO SECRETARIAT**

Dr. S. Micallef  
Technical Secretary of the Working Group  
International Maritime Organization  
Marine Environment Division  
4 Albert Embankment  
London SE1 7SR  
United Kingdom

E-mail: [smicallef@imo.org](mailto:smicallef@imo.org)  
Tel: +44 (0)20 7735 7611  
Fax: +44 (0)20 7587 3210

Mr. N. M. Soutar  
IMO Technical Advisor  
International Maritime Organization  
Marine Environment Division  
4 Albert Embankment  
London SE1 7SR  
United Kingdom

E-mail: [nsoutar@imo.org](mailto:nsoutar@imo.org)  
Tel: +44 (0)20 7463 4217  
Fax: +44 (0)20 7587 3210

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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) phthalates
- 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

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## ANNEX 3

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

<b>COMPOUND</b>		<b>RATINGS</b>	
	<b>Entries in IBC Code</b>	<b>E2</b>	<b>A2</b>
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		RATINGS	
	Entries in IBC Code	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 alumino silicate 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

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**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			<b>RTECS No</b>	AF1225000				<b>CAS No:</b>						64-19-7	
Acetic anhydride		12	0	0	0	R	1	NI	1	0	2	3	3	A	NI	D	3
		65			<b>RTECS No</b>	AK1925000				<b>CAS No:</b>						108-24-7	
Acetochlor		2047	3	2	2	NR	4	NI	1	0	(1)	0	0	S	NI	S	2
		66			<b>RTECS No</b>	AB5457000				<b>CAS No:</b>						34256-82-1	
Acetone		15	0	0	0	R	0	0	0	0	0	1	2	NT	DE	2	
		67			<b>RTECS No</b>	AL3150000				<b>CAS No:</b>						67-64-1	
Acetone cyanohydrin		14	0	0	0	R	4	NI	3	4	3	(3)	(3)	NI	D	3	
		68			<b>RTECS No</b>	OD9275000				<b>CAS No:</b>						75-86-5	
Acetonitrile		16	0	0	0	R	1	NI	1	1	2	1	2	NI	D	2	
		69			<b>RTECS No</b>	AL7700000				<b>CAS No:</b>						75-05-8	
Acetonitrile (Low purity grade)		2333	0	NI	0	R	3	NI	1	1	2	1	2	NI	D	2	
		2876			<b>RTECS No</b>					<b>CAS No:</b>							
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			<b>RTECS No</b>					<b>CAS No:</b>							
Acrylamide solution (50% or less)		23	0	0	0	R	2	0	2	2	(2)	1	2	CMNS	NI	D	3
		70			<b>RTECS No</b>	AS3325000				<b>CAS No:</b>						79-06-1	
Acrylic acid		24	0	0	0	R	4	NI	2	2	2	3C	3	NI	D	3	
		71			<b>RTECS No</b>	AS4375000				<b>CAS No:</b>						79-10-7	
Acrylonitrile		25	0	2	2	NR	3	0	2	2	2	2	2	CSM	NT	DE	3
		72			<b>RTECS No</b>	AT5250000				<b>CAS No:</b>						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			<b>RTECS No</b>					<b>CAS No:</b>						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	<b>RTECS No</b>				<b>CAS No:</b>				67762-30-5						
Alkanes (C6-C9)	2202	(5)	NI	(5)	(R)	(4)	NI	(0)	(0)	(1)	(2)	(2)	N	NI	FE	2
	88	<b>RTECS No</b>				<b>CAS No:</b>										
Iso- and cyclo-alkanes (C10-C11)	2203	(5)	NI	(5)	NI	(0)	(0)	(0)	(0)	(1)	(1)	(0)		NI	F	1
	393	<b>RTECS No</b>				<b>CAS No:</b>										
Iso- and cyclo-alkanes (C12+)	2204	(5)	NI	(5)	NI	(0)	NI	0	0	(1)	NI	NI		NI	NI	1
	394	<b>RTECS No</b>				<b>CAS No:</b>				112-40-3						
n-Alkanes (C10+)	296	(5)	NI	(5)	(R)	(0)	(0)	(0)	(0)	(1)	(1)	(0)	A	NI	F	3
	471	<b>RTECS No</b>				<b>CAS No:</b>										
Alkaryl polyethers (C9-C20)	1974	4	NI	4	NR	3	NI	0	0	(3)	2	3		NI	S	2
	90	<b>RTECS No</b>				<b>CAS No:</b>				26027-38-3						
Alkenyl (C11+) amide	1858	3	NI	3	(NR)	4	NI	0	(0)	(1)	0	1		NI	Fp	2
	838	<b>RTECS No</b>				<b>CAS No:</b>										
Alkenyl (C16-C20) succinic anhydride	298	0	0	0	NR	1	NI	0	0	(2)	2	(2)	S	NI	FD	2
	2336	<b>RTECS No</b>				<b>CAS No:</b>										
Alkyl acrylate-vinylpyridine copolymer in toluene	299	2	2	2	R	2	0	0	0	(2)	2	2	RNA	NI	F/Fp	3
	94	<b>RTECS No</b>				<b>CAS No:</b>										
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	<b>RTECS No</b>				<b>CAS No:</b>										
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	<b>RTECS No</b>				<b>CAS No:</b>				26444-49-5						
Alkylated (C4-C9) hindered phenols	2273	0	2	0	NR	1	0	1	0	(2)	1	1		NI	Fp	2
	2575	<b>RTECS No</b>				<b>CAS No:</b>										
Alkylbenzene, alkylindane, alkylindene mixture (each C12-C17)	1872	0	4	4	NR	0	NI	0	0	0	0	2		NI	FE	2
	103	<b>RTECS No</b>				<b>CAS No:</b>										

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3	
Alkyl benzene distillation bottoms		300	0	2	2	NR	0	(3)	0	0	1	1	1	NI	Fp	2	
	3106	<b>RTECS No</b>				<b>CAS No:</b>											
Alkylbenzene mixtures (containing at least 50% of toluene)		2303	(2)	(2)	(2)	(R)	(3)	(0)	0	0	(2)	2	2	ACMNR	NI	FE	3
	2909	<b>RTECS No</b>				<b>CAS No:</b>				68527-23-1							
Alkyl (C3-C4) benzenes		2206	(3)	NI	(3)	R	4	NI	0	0	(2)	(2)	(1)	NI	FE	2	
	91	<b>RTECS No</b>				<b>CAS No:</b>											
Alkyl (C5-C8) benzenes		2207	5	4	4	NI	4	NI	0	0	(2)	(2)	(1)	NI	F	2	
	92	<b>RTECS No</b>				<b>CAS No:</b>											
Alkyl(C9+)benzenes		1783	0	4	4	NR	1	NI	0	(0)	(1)	(1)	(1)	NI	F	1	
	100	<b>RTECS No</b>				<b>CAS No:</b>											
Alkyl (C11-C17) benzene sulphonic acid		1739	NI	NI	3	R	3	1	1	(1)	(2)	(1)	(1)	NI	D	2	
	101	<b>RTECS No</b>				<b>CAS No:</b>				27176-87-0							
Alkylbenzene sulphonic acid, sodium salt solution		301	3	3	3	R	3	1	1	(1)	(3)	2	3	NI	FD	3	
	102	<b>RTECS No</b>				DB4370000				<b>CAS No:</b>							
Alkyl (C12+) dimethylamine		2248	3	NI	3	R	5	2	1	(1)	(3)	3C	3	NI	F	3	
	2485	<b>RTECS No</b>				<b>CAS No:</b>											
Alkyl dithiocarbamate (C19-C35)		2236	0	NI	0	NI	1	NI	0	0	(0)	0	0	NI	S	0	
	2538	<b>RTECS No</b>				<b>CAS No:</b>											
Alkyldithiothiadiazole (C6-C24)		1981	5	NI	5	NR	1	NI	0	0	(0)	0	0	NI	S	2	
	104	<b>RTECS No</b>				<b>CAS No:</b>											
Alkyl ester copolymer (C4-C20)		1986	NI	0	0	NR	0	NI	0	0	(0)	0	0	NI	Fp	2	
	2202	<b>RTECS No</b>				<b>CAS No:</b>											
Alkyl (C8-C10)/(C12-C14):(40% or less/60% or more) polyglucoside solution (55% or less)		2134	3	NI	3	R	3	0	0	0	(3)	2	3	NI	D	3	
	2248	<b>RTECS No</b>				<b>CAS No:</b>				141464-42-8							
Alkyl (C8-C10)/(C12-C14):(60% or more/40% or less) polyglucoside solution(55% or less)		2135	3	NI	3	R	2	0	0	0	(2)	2	2	NI	D	2	
	2246	<b>RTECS No</b>				<b>CAS No:</b>				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	<b>RTECS No</b>				<b>CAS No:</b>				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	<b>RTECS No</b>				<b>CAS No:</b>											
Alkyl (C8-C40) phenol sulphide	1985	0	NI	0	NR	0	NI	0	0	(1)	1	1		NI	FD	1	
	2253	<b>RTECS No</b>				<b>CAS No:</b>											
Alkyl (C8-C9) phenylamine in aromatic solvents	2096	2	NI	2	NR	3	NI	(0)	(0)	(2)	2	2		NI	S	2	
	2200	<b>RTECS No</b>				<b>CAS No:</b>											
Alkyl (C9-C15) phenyl propoxylate	2188	0	NI	0	NR	0	NI	0	0	(2)	2	2		NI	FD	2	
	2430	<b>RTECS No</b>				<b>CAS No:</b>											
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	<b>RTECS No</b>				<b>CAS No:</b>											
Alkyl (C12-C14) polyglucoside solution (55% or less)	2137	3	NI	3	R	3	0	0	0	(3)	2	3		NI	D	3	
	2249	<b>RTECS No</b>				<b>CAS No:</b>				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	<b>RTECS No</b>				<b>CAS No:</b>				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	<b>RTECS No</b>				<b>CAS No:</b>											
Alkyl sulphonic acid ester of phenol	1878	5	NI	5	NR	0	NI	0	(0)	(0)	0	0		NI	S	0	
	1701	<b>RTECS No</b>				<b>CAS No:</b>				91082-17-6							
Allyl alcohol	28	0	0	0	R	4	NI	2	3	4	2	3	A	NI	D	3	
	105	<b>RTECS No</b>				BA5075000				<b>CAS No:</b>							
Allyl chloride	478	1	1	1	R	3	NI	1	0	2	1	3	T	NI	E	3	
	106	<b>RTECS No</b>				UC7350000				<b>CAS No:</b>							
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	<b>RTECS No</b>				<b>CAS No:</b>											

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	<b>RTECS No</b>				<b>CAS No:</b>										
2-(2-Aminoethoxy) ethanol	75	0	0	0	NR	1	0	0	1	(3)	3	3		NI	D	3
	37	<b>RTECS No</b> KJ6125000				<b>CAS No:</b>										
Aminoethyldiethanolamine/Aminoethylethanolamine solution	74	Inor	0	0	NR	1	0	1	(1)	(3)	(3B)	(2)	S	NI	D	3
	113	<b>RTECS No</b>				<b>CAS No:</b>										
Aminoethyl ethanolamine	68	0	0	0	NR	1	0	0	0	0	3B	2	S	NI	D	3
	112	<b>RTECS No</b> KJ6300000				<b>CAS No:</b>										
N-Aminoethylpiperazine	88	0	0	0	NR	1	NI	0	2	(3)	3	3	S	NI	D	3
	472	<b>RTECS No</b> TK8050000				<b>CAS No:</b>										
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	<b>RTECS No</b> TY2900000				<b>CAS No:</b>										
2-Amino-2-methyl-1-propanol	90	0	0	0	NR	1	NI	0	0	(0)	NI	NI		NI	DE	NI
	39	<b>RTECS No</b> UA5950000				<b>CAS No:</b>										
Ammonia aqueous (28% or less)	91	0	0	0	R	3	2	1	(2)	3	3	3		NI	DE	3
	114	<b>RTECS No</b> BO0875000				<b>CAS No:</b>										
Ammonium bisulphite solution (70% or less)	1730	NI	NI	NI	NI	1	NI	NI	NI	NI	2	2		NI	D	2
	115	<b>RTECS No</b> WT3595000				<b>CAS No:</b>										
Ammonium hydrogen phosphate solution	98	0	0	0	Inorg	1	NI	0	0	0	(1)	(1)		NI	D	1
	117	<b>RTECS No</b>				<b>CAS No:</b>										
Ammonium lignosulphonate solutions	2086	0	NI	0	NR	0	NI	0	(0)	(0)	0	0		NI	D	0
	118	<b>RTECS No</b>				<b>CAS No:</b>										
Ammonium nitrate solution (93% or less)	1912	Inor	0	0	Inorg	1	NI	0	0	(2)	1	2		NI	D	2
	119	<b>RTECS No</b>				<b>CAS No:</b>										
Ammonium polyphosphate solution	1764	Inor	0	0	Inorg	1	NI	0	0	0	1	0		NI	D	1
	120	<b>RTECS No</b>				<b>CAS No:</b>										

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	<b>RTECS No</b>				<b>CAS No:</b>										
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	<b>RTECS No</b>				<b>CAS No:</b>										
Barium long chain (C11-C50) alkaryl sulphonate	1978	4	NI	4	NR	3	NI	2	0	(2)	0	0	NI	S	2	
	2370	<b>RTECS No</b>				<b>CAS No:</b>										
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	<b>RTECS No</b> CY1400000				<b>CAS No:</b>										
Benzene sulphonyl chloride	320	1	1	1	R	(1)	NI	1	(2)	(3)	3	3	NI	SD	3	
	134	<b>RTECS No</b> DB8750000				<b>CAS No:</b>										
Benzenetricarboxylic acid, trioctyl ester	1733	0	0	0	NR	0	NI	0	(0)	2	1	1	NI	Fp	2	
	136	<b>RTECS No</b>				<b>CAS No:</b>										
Benzyl acetate	348	1	NI	1	R	3	1	1	0	2	1	1	NI	SD	2	
	138	<b>RTECS No</b> AF5075000				<b>CAS No:</b>										
Benzyl alcohol	349	1	NI	1	R	2	NI	1	1	2	2	2	NI	SD	2	
	139	<b>RTECS No</b> DN3150000				<b>CAS No:</b>										
Benzyl chloride	352	NI	1	1	R	3	1	1	(2)	3	2	3	CSA	NI	S	3
	140	<b>RTECS No</b> XS8925000				<b>CAS No:</b>										
N,N-bis(2-hydroxyethyl) oleamide	2110	5	NI	5	NR	NI	NI	0	0	(2)	2	2	NI	Fp	2	
	2201	<b>RTECS No</b>				<b>CAS No:</b>										
Borax	359	Inor	0	0	Inorg	1	0	0	0	(1)	1	1	R	NI	S	3
	143	<b>RTECS No</b> VZ2275000				<b>CAS No:</b>										
Boric acid	360	Inor	0	0	Inorg	1	0	0	(0)	(1)	1	1	R	NI	S	3
	2254	<b>RTECS No</b> ED4550000				<b>CAS No:</b>										
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	<b>RTECS No</b>				<b>CAS No:</b>										

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Brominated epoxy resin in acetone		NI	NI		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
	3069	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	<b>RTECS No</b>					<b>CAS No:</b>				97-88-1					
Butylene glycol	402	0	NI	0	R	1	NI	1	0	0	0	0		NI	D	1
	156	<b>RTECS No</b> EK0525000					<b>CAS No:</b>				110-63-4					
1,2-Butylene oxide	403	0	NI	0	NR	2	NI	1	1	2	1	1	C	NI	DE	3
	8	<b>RTECS No</b> EK3675000					<b>CAS No:</b>				106-88-7					
n-Butyl ether	578	3	3	3	NR	2	NI	0	0	0	1	1		NI	FE	2
	475	<b>RTECS No</b> EK5425000					<b>CAS No:</b>				142-96-1					
Butyl methacrylate	409	2	NI	2	NR	1	NI	0	0	0	2	2	S	NI	FE	2
	151	<b>RTECS No</b> OZ3675000					<b>CAS No:</b>				97-88-1					
Butyl octyl phthalate	410	5	NI	5	(R)	0	2	0	0	(1)	1	1	R	NI	Fp	3
	2749	<b>RTECS No</b>					<b>CAS No:</b>				85-69-8					
n-Butyl propionate	1483	2	NI	2	R	2	NI	0	0	0	1	1		NI	FED	2
	476	<b>RTECS No</b> UE8245000					<b>CAS No:</b>				590-01-2					
Butyl stearate	413	0	NI	0	NI	0	NI	0	NI	NI	NI	NI		NI	Fp	2
	152	<b>RTECS No</b> WI2900000					<b>CAS No:</b>				123-95-5					
Butyraldehyde (all isomers)	416	1	NI	1	R	2	0	0	1	0	3	3		NI	DE	3
	157	<b>RTECS No</b> ES2275000					<b>CAS No:</b>				123-72-8					
Butyric acid	418	0	NI	0	R	2	0	0	1	0	3A	3		NI	D	3
	158	<b>RTECS No</b> ES5425000					<b>CAS No:</b>				107-92-6					
gamma-Butyrolactone	420	0	NI	0	R	(3)	NI	1	(0)	0	0	1	C	NI	D	3
	360	<b>RTECS No</b> LU3500000					<b>CAS No:</b>				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	<b>RTECS No</b>					<b>CAS No:</b>									
Calcium carbonate slurry	2016	Inor	0	0	Inorg	1	NI	0	(0)	(2)	1	2		NI	S	2
	161	<b>RTECS No</b> FF9335000					<b>CAS No:</b>				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	<b>RTECS No</b> EW2800000			<b>CAS No:</b>			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	<b>RTECS No</b> NH3485000			<b>CAS No:</b>			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	<b>RTECS No</b> NH3485000			<b>CAS No:</b>			7778-54-3								
Calcium lignosulphonate solutions		2087	0	NI	0	NR	0	NI	0	(0)	(0)	0	0	NI	D	0	
		165	<b>RTECS No</b>			<b>CAS No:</b>											
Calcium long-chain alkaryl sulphonate (C11-C50)		1973	NI	0	0	NR	0	NI	0	0	(1)	1	1	S	NI	FD	2
		169	<b>RTECS No</b>			<b>CAS No:</b>			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	<b>RTECS No</b>			<b>CAS No:</b>											
Calcium long-chain alkyl(C11-C40) phenate		2097	0	NI	0	NR	0	NI	0	0	(1)	1	1	NI	Fp	2	
		167	<b>RTECS No</b>			<b>CAS No:</b>											
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	<b>RTECS No</b>			<b>CAS No:</b>											
Calcium long-chain alkyl phenolic amine (C8-C40)		1728	NI	NI	NI	NR	0	NI	0	0	(1)	1	(1)	NI	Fp	2	
		171	<b>RTECS No</b>			<b>CAS No:</b>											
Calcium long-chain alkyl salicylate (C13+)		70	0	NI	0	NR	2	NI	0	0	(1)	(1)	(1)	S	NI	Fp	3
		166	<b>RTECS No</b>			<b>CAS No:</b>			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	<b>RTECS No</b>			<b>CAS No:</b>			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	<b>RTECS No</b> EW2985000			<b>CAS No:</b>			10124-37-5								
Camphor oil		1897	NI	NI	NI	NI	NI	NI	2	NI	(2)	1	NI	(T)	FE	2	
		174	<b>RTECS No</b> EX1490000			<b>CAS No:</b>			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	NI
		175		RTECS No				CAS No:								
Carbolic oil		437	(3)	3	(3)	(NR)	(3)	(1)	2	2	3	3	3	ATNCM	NI	FED
		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
		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
		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
		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
		3044		RTECS No				CAS No:								2
Castor oil (containing less than 2% free fatty acids)		442	0	NI	0	R	(2)	NI	0	0	(1)	1	1		NI	Fp
		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
		180		RTECS No				CAS No:								2
Chlorinated paraffins (C10-C13)		2021	5	5	5	NR	5	2	0	0	(1)	1	1	C	NI	S
		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
		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
		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
		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-Choronitrobenzene		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+) alcanoic 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	
			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	4	NI	4	(NR)	4	NI	(0)	0	(1)	(0)	(1)	NI	FE	2	
		205		RTECS No	GU3140000			CAS No:						291-64-5			
Cyclohexane		536	3	3	3	NR	3	NI	0	0	1	0	1	NI	E	2	
		206		RTECS No	GU6300000			CAS No:						110-82-7			
Cyclohexanol		537	1	NI	1	R	2	NI	0	0	0	2	2	NI	Fp	2	
		207		RTECS No	GV7875000			CAS No:						108-93-0			
Cyclohexanone		539	0	1	1	R	1	0	1	1	1	2	2	NI	FE	2	
		208		RTECS No	GW1050000			CAS No:						108-93-0			
Cyclohexanone, Cyclohexanol mixture		1436	1	1	1	R	2	NI	1	1	1	2	2	NI	FED	2	
		209		RTECS No				CAS No:									
Cyclohexyl acetate		541	2	NI	2	(R)	(2)	NI	0	0	(2)	2	1	NI	FED	2	
		210		RTECS No	AG5075000			CAS No:						622-45-7			
Cyclohexylamine		542	1	NI	1	R	2	NI	2	2	3	3	3	S	NI	D	3
		211		RTECS No	GX0700000			CAS No:						108-91-8			
1,3-Cyclopentadiene dimer (molten)		545	3	3	3	NR	3	NI	2	0	3	2	2	NI	Fp	2	
		11		RTECS No	PC1050000			CAS No:						77-73-6			
Cyclopentane		546	3	NI	3	NR	3	NI	(0)	(0)	0	1	(1)	NI	E	2	
		212		RTECS No	GY2390000			CAS No:						287-92-3			
Cyclopentene		547	2	NI	2	NI	3	NI	1	1	0	NI	NI	NI	E	2	
		213		RTECS No	GY5950000			CAS No:						142-29-0			
p-Cymene		549	4	4	4	(NR)	3	NI	0	(0)	1	2	(1)	NI	FE	2	
		552		RTECS No	GZ5950000			CAS No:						99-87-6			
Decahydronaphthalene		551	4	4	4	NR	3	NI	0	0	(1)	1	1	NI	F	1	
		214		RTECS No	QJ3150000			CAS No:						91-17-8			
Decane		554	5	NI	5	R	0	0	0	0	0	1	0	NI	F	1	
		2620		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	4	NI	4	R	4	1	0	0	(2)	2	2	NI	Fp	2	
		215		RTECS No	HD9100000			CAS No:						334-48-5			
Decene		558	5	NI	5	R	4	2	0	0	0	2	0	A	NI	F	3
		216		RTECS No				CAS No:						25339-53-1			
Decyl acetate		1767	4	NI	4	NI	NI	NI	0	0	(1)	(1)	(1)	NI	F	1	
		217		RTECS No				CAS No:						112-17-4			
Decyl acrylate		559	5	NI	5	NI	5	NI	0	0	(2)	2	1	NI	Fp	2	
		218		RTECS No	AS7400000			CAS No:						2156-96-9			
Decyl alcohol (all isomers)		557	3	2	2	R	3	NI	0	0	0	2	1	NI	Fp	2	
		219		RTECS No	NR0960000			CAS No:						25339-17-7			
Decyloxytetrahydrothiophene dioxide		1859	3	NI	3	NR	4	NI	0	0	(1)	1	0	NI	Fp	2	
		220		RTECS No				CAS No:						18760-44-6			
Diacetone alcohol		563	0	NI	0	R	1	0	0	0	(2)	2	2	NI	D	2	
		226		RTECS No	SA9100000			CAS No:						123-42-2			
Dialkyl (C8-C9) diphenylamines		1852	5	NI	5	NR	1	0	0	0	(0)	0	0	NI	FD	0	
		2255		RTECS No				CAS No:									
Dialkyl (C7-C13) phthalates		566	0	4	4	(NR)	0	2	0	0	(1)	1	1	R	NI	Fp	3
		227		RTECS No				CAS No:									
Dialkyl (C9 - C10) Phthalates		2359	(0)	(0)	(0)	(R)	(0)	(0)	0	0	(1)	0	1	NI	Fp	2	
		3121		RTECS No				CAS No:									
Dibromomethane		574	1	NI	1	NR	(2)	NI	1	0	0	NI	NI	NI	SD	1	
		228		RTECS No	PA7350000			CAS No:						74-95-3			
Dibutylamine		577	2	NI	2	R	3	NI	2	2	3	3	3	NI	FD	3	
		231		RTECS No	HR7780000			CAS No:						110-96-3			
Dibutyl hydrogen phosphate		1857	1	NI	1	NI	2	NI	0	0	(3)	3	3	NI	F	3	
		229		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
1,1-Dichloropropane	605	2	1	1	NR	2	1	0	0	1	1	1	NI	SD	1	
	5	RTECS No	TX9450000					CAS No:					78-99-9			
1,2-Dichloropropane	606	2	1	1	NR	2	1	1	0	2	2	2	NI	SD	2	
	9	RTECS No	TX9625000					CAS No:					78-87-5			
1,3-Dichloropropane	607	2	1	1	NR	2	1	0	NI	NI	NI	NI	NI	SD	NI	
	12	RTECS No	TX9660000					CAS No:					542-75-6			
1,3-Dichloropropene	612	1	NI	1	NR	4	1	2	1	2	3	3	CS	NI	SD	3
	13	RTECS No	UC8310000					CAS No:					542-75-6			
Dichloropropene/Dichloropropane mixtures	608	2	1	1	NR	4	1	2	1	2	3	3	CS	NI	SD	3
	235	RTECS No	TX9800000					CAS No:					8003-19-8			
2,2-Dichloropropionic acid	609	2	2	2	NR	2	NI	1	0	(3)	3	3	NI	D	3	
	28	RTECS No	UF0690000					CAS No:					75-99-0			
Diethanolamine	620	0	NI	0	R	1	0	1	0	0	2	3	T	NI	D	3
	236	RTECS No	KL2975000					CAS No:					111-42-2			
Diethylamine	621	0	NI	0	R	2	NI	1	2	3	3C	3	NI	DE	3	
	240	RTECS No	HZ8750000					CAS No:					109-89-7			
Diethylaminoethanol	622	0	NI	0	NR	3	NI	1	1	2	3	3	NI	D	3	
	241	RTECS No	KK5075000					CAS No:					100-37-8			
2,6-Diethylaniline	1437	3	3	3	NR	2	NI	1	1	(2)	1	2	NI	FD	2	
	35	RTECS No	BX3500000					CAS No:					579-66-8			
Diethylbenzene	624	4	4	4	NR	3	NI	0	(0)	(2)	2	1	NI	F	2	
	242	RTECS No	CZ5600000					CAS No:					25340-17-4			
Di-(2-ethylbutyl) phthalate	625	5	NI	5	R	0	2	0	0	(1)	1	1	R	NI	Fp	3
	2750	RTECS No	TI1100000					CAS No:								
Diethylene glycol	628	0	NI	0	R	0	0	1	0	2	1	1	NI	D	2	
	243	RTECS No	ID5950000					CAS No:					111-46-6			

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	0	2	2	R	0	NI	0	0	(1)	1	1	R	NI	Fp	3
		252			<b>RTECS No</b>	TI1090000				<b>CAS No:</b>						3648-21-3	
Di-n-hexyl adipate		656	5	NI	5	(NR)	5	0	0	0	(1)	0	1		NI	FE	1
		224			<b>RTECS No</b>	AV1150000				<b>CAS No:</b>						110-33-8	
Dihexyl phthalate		2125	5	NI	5	R	0	2	0	0	(1)	1	1	R	NI	Fp	3
		253			<b>RTECS No</b>	TI1100000				<b>CAS No:</b>						84-75-3	
1,4-Dihydro-9,10-dihydroxyanthracene, disodium salt solution		657	1	NI	1	NI	1	NI	0	NI	NI	NI	NI		NI	D	NI
		15			<b>RTECS No</b>					<b>CAS No:</b>							
Diisobutylamine		576	2	NI	2	R	3	NI	2	(2)	2	(3)	(3)		NI	FED	3
		256			<b>RTECS No</b>	TX1750000				<b>CAS No:</b>						110-96-3	
Diisobutylene		575	4	4	4	NR	3	NI	0	0	0	1	0		NI	FE	2
		257			<b>RTECS No</b>	SB2715000				<b>CAS No:</b>						25167-70-8	
Diisobutyl ketone		579	3	NI	3	R	2	NI	0	0	2	2	2		NI	F	2
		254			<b>RTECS No</b>	MJ5775000				<b>CAS No:</b>						108-83-8	
Diisobutyl phthalate		581	4	(4)	4	R	4	1	0	0	(0)	0	0	R	NI	S	3
		255			<b>RTECS No</b>	TI1225000				<b>CAS No:</b>						84-69-5	
Diisodecyl phthalate		619	0	0	0	(R)	0	NI	0	0	(0)	0	1		NI	Fp	2
		3119			<b>RTECS No</b>	TI1270000				<b>CAS No:</b>						26761-40-0	
Diisononyl adipate		690	0	NI	0	R	0	0	0	0	(1)	1	1		NI	Fp	2
		258			<b>RTECS No</b>					<b>CAS No:</b>						33703-08-1	
Diisononyl phthalate		691	0	0	0	R	0	0	0	0	(0)	0	0		NI	Fp	2
		3120			<b>RTECS No</b>					<b>CAS No:</b>							
Diisoctyl phthalate		693	0	4	4	(NR)	0	0	0	0	(1)	1	0		NI	Fp	2
		259			<b>RTECS No</b>	TI1300000				<b>CAS No:</b>						27554-26-3	
Diisopropanolamine		703	0	NI	0	NR	1	NI	0	0	0	2	3		NI	FD	3
		260			<b>RTECS No</b>	UB6600000				<b>CAS No:</b>						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:									
Diisopropynaphthalene		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	5	NI	5	R	4	NI	1	(1)	(3)	3	3	NI	F	3	
		468		RTECS No	JR6600000			CAS No:						112-18-5			
Dimethylethanolamine		667	0	NI	0	R	2	NI	1	1	2	3	3	NI	D	3	
		273		RTECS No	KK6125000			CAS No:						108-01-0			
Dimethylformamide		676	0	0	0	R	1	0	0	1	2	1	2	R	NI	D	3
		274		RTECS No	LQ2100000			CAS No:						68-12-2			
Dimethyl glutarate		670	0	NI	0	R	3	NI	0	0	2	3	2	A	NI	SD	3
		265		RTECS No				CAS No:						1119-40-0			
Dimethyl hydrogen phosphite		673	0	NI	0	NR	2	NI	1	0	0	1	1	NI	D	1	
		266		RTECS No	SZ7710000			CAS No:						868-85-9			
Dimethyl octanoic acid		675	3	NI	3	R	4	1	0	0	(2)	2	2	NI	Fp	2	
		267		RTECS No				CAS No:						29662-90-6			
Dimethyl phthalate		678	2	2	2	R	2	0	0	0	(1)	0	1	R	NI	SD	3
		268		RTECS No	TI1575000			CAS No:						131-11-3			
Dimethylpolysiloxane		1161	NI	4	4	NI	2	NI	0	(0)	(0)	0	0	NI	F	1	
		275		RTECS No				CAS No:									
2,2-Dimethylpropane-1,3-diol (molten or solution)		679	0	0	0	NR	0	0	0	0	0	2	2	NI	FD	2	
		29		RTECS No	TY5775000			CAS No:						126-30-7			
Dimethyl succinate		681	0	NI	0	NI	2	NI	0	0	0	0	2	NI	SD	2	
		269		RTECS No	WM7675000			CAS No:						106-65-0			
Dinitrotoluene (molten)		688	2	2	2	NR	4	2	2	(2)	(2)	1	0	CMR	NI	S	3
		276		RTECS No	XT1300000			CAS No:						25321-14-6			
Dinonyl phthalate		689	0	NI	0	R	0	O	0	0	(1)	1	1	R	0	Fp	3
		2993		RTECS No	TI1800000			CAS No:						28553-12-0			
Dioctyl phthalate		692	0	(4)	(4)	(NR)	0	0	0	0	(1)	1	(1)	R	NI	Fp	3
		277		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	0	0	0	NR	0	0	0	0	0	0	2	C	NI	D	3
	16	RTECS No	JG8225000					CAS No:							123-91-1	
Dipentene	686	4	NI	4	NR	2	NI	0	0	(2)	2	2	S	NI	F	3
	278	RTECS No	OS8100000					CAS No:							138-86-3	
Diphenyl	694	3	4	4	R	4	1	0	0	(2)	2	1		NI	S	2
	279	RTECS No	DU8050000					CAS No:							92-52-4	
Diphenylamine (molten)	2186	3	3	3	NR	3	1	0	0	(1)	1	1		NI	S	1
	285	RTECS No						CAS No:							122-39-4	
Diphenylamine, reaction product with 2,2,4-Trimethylpentene	1500	NI	1	1	NR	3	NI	0	0	(1)	1	1	S	NI	Fp	3
	286	RTECS No						CAS No:							68411-46-1	
Diphenylamines, alkylated	1770	5	NI	5	NR	(3)	NI	0	0	(1)	(1)	(1)	S	NI	F	3
	287	RTECS No						CAS No:							68921-45-9	
Diphenyl/Diphenyl ether mixtures	698	NI	NI	4	NR	4	1	0	0	(1)	1	1		(T)	S	1
	283	RTECS No	DV1500000					CAS No:							8004-13-5	
1,1-Diphenylethane, Ethylenated benzene by-products		NI	NI		NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI
	2945	RTECS No						CAS No:								
Diphenyl ether	699	4	4	4	NR	4	NI	0	0	0	1	1		T	S	1
	281	RTECS No	KN8970000					CAS No:							101-84-8	
Diphenyl ether/Diphenyl phenyl ether mixture	702	5	NI	5	NR	4	NI	0	0	0	1	1		(T)	S	1
	282	RTECS No						CAS No:								
Diphenylmethane diisocyanate	700	5	2	2	NR	0	0	0	0	4	2	2	S	NI	S	3
	288	RTECS No	NQ9350000					CAS No:							101-68-8	
Diphenylol propane	2289	4	NI	4	NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI
	289	RTECS No						CAS No:								
Diphenylol propane-epichlorohydrin resins	2237	3	NI	3	NR	4	NI	0	0	(2)	1	2		NI	S	2
	290	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	3	NI	3	R	4	NI	1	0	(3)	3	3	NI	F	3	
		303		<b>RTECS No</b>				<b>CAS No:</b>									
Dodecylbenzene		126	0	NI	0	NR	0	3	0	0	(2)	(2)	(1)	NI	F	2	
		304		<b>RTECS No</b> CZ9540000				<b>CAS No:</b>								123-01-3	
Dodecyl diphenyl ether disulphonate solution		723	(5)	NI	5	NR	4	1	1	0	(3)	1	3	NI	D	3	
		299		<b>RTECS No</b> JR8050000				<b>CAS No:</b>								119345-04-9	
Dodecyl hydroxypropyl sulphide		1861	5	NI	5	NI	4	NI	0	0	(0)	0	0	NI	FD	0	
		2252		<b>RTECS No</b>				<b>CAS No:</b>									
Dodecyl methacrylate		893	5	NI	5	NR	0	NI	0	(0)	(1)	1	1	NI	F	1	
		300		<b>RTECS No</b> OZ4300000				<b>CAS No:</b>								142-90-5	
Dodecyl/Octadecyl methacrylate (mixture)		2116	(5)	NI	(5)	(NR)	(0)	NI	0	0	(1)	1	(1)	NI	Fp	2	
		1717		<b>RTECS No</b>				<b>CAS No:</b>									
Dodecyl/Pentadecyl methacrylate mixture		724	(5)	NI	(5)	(NR)	(0)	NI	0	(0)	(1)	(1)	(1)	NI	Fp	2	
		302		<b>RTECS No</b>				<b>CAS No:</b>									
Dodecyl phenol		725	0	4	4	NI	4	NI	0	0	(3)	3	2	NI	Fp	3	
		301		<b>RTECS No</b> SL3675000				<b>CAS No:</b>								27193-86-8	
Dodecyl Xylene		1763	0	NI	0	NI	0	NI	0	0	(1)	1	1	NI	Fp	2	
		306		<b>RTECS No</b>				<b>CAS No:</b>									
Drilling brines (containing zinc salts)		1425	Inor	4	4	Inorg	4	1	(1)	(1)	(3)	(3)	(3)	NI	D	3	
		307		<b>RTECS No</b> ZH1400000				<b>CAS No:</b>								7646-85-7	
Drilling brines, including:calcium bromide solution, calcium chloride solution and sodium chloride solution		427	Inor	0	0	Inorg	1	0	(0)	(0)	(2)	(1)	(2)	NI	D	2	
		308		<b>RTECS No</b> EV9328000				<b>CAS No:</b>								7789-41-5	
Epichlorohydrin		731	0	NI	0	R	3	1	2	2	3	3a	3	CS	NI	D	3
		309		<b>RTECS No</b> TX4900000				<b>CAS No:</b>								106-89-8	
Ethanolamine		733	0	NI	0	R	2	0	1	1	3	3a	3	NI	D	3	
		311		<b>RTECS No</b> KJ5775000				<b>CAS No:</b>								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 0 NI 0 R 2 0 1 0 1 1 2 R NI D 3	41	RTECS No	KK8225000	CAS No:									111-15-9		
Ethoxylated long chain (C16+) alkyloxyalkylamine	2103 5 NI 5 NR 1 NI 0 0 (3) 3 (3) NI Fp 3	2203	RTECS No		CAS No:											
Ethoxylated tallow amine, glycol mixture	2252 2 NI 2 NR 6 NI 1 0 3 2 3 S NI D 3	2476	RTECS No		CAS No:											
Ethyl acetate	735 0 2 2 R 1 0 0 0 1 0 1 NI DE 2	312	RTECS No	AH5425000	CAS No:									141-78-6		
Ethyl acetoacetate	736 0 0 0 R 1 NI 0 0 (1) 1 1 NI D 1	313	RTECS No	AK5250000	CAS No:									141-97-9		
Ethyl acrylate	734 1 NI 1 R 3 1 1 2 2 2 2 SC T ED 3	314	RTECS No	AT0700000	CAS No:									140-88-5		
Ethyl alcohol	732 0 NI 0 R 0 NI 0 0 0 1 2 NI D 2	315	RTECS No	KQ6300000	CAS No:									64-17-5		
Ethylamine	1016 0 NI 0 R 2 NI 2 2 1 3 3 NI GD 3	322	RTECS No	KH2100000	CAS No:									75-04-7		
Ethylamine solutions (72% or less)	2219 NI NI 0 R 2 NI 2 2 1 3 3 NI DE 3	323	RTECS No		CAS No:									75-04-7		
Ethyl amyl ketone	1784 2 NI 2 NI 2 NI 0 0 (2) 2 NI NI FD 2	316	RTECS No	RH1485000	CAS No:									106-68-3		
Ethylbenzene	740 3 2 2 R 3 1 0 0 0 2 2 C NI FE 3	324	RTECS No	DA070000	CAS No:									100-41-4		
N-Ethylbutylamine	745 1 NI 1 NI NI NI 1 1 2 3 3 NI FED 3	477	RTECS No	EO4880000	CAS No:									13360-63-9		
Ethyl tert-butyl ether	2085 1 NI 1 NI 2 NI 0 0 2 2 2 NI E 2	320	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-Eethylhexanoic 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-Eethylhexyl 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	2	NI	2	NI	3	NI	1	1	3	3	3	NI	FD	3	
		48		RTECS No	MQ5250000			CAS No:							104-75-6		
2-Ethyl-2-(hydroxymethyl) propane-1,3-diol (C8-C10) ester		2054	0	NI	0	R	0	NI	0	(0)	(0)	0	(0)	NI	Fp	2	
		42		RTECS No				CAS No:									
Ethyldene norbornene		783	3	3	3	NR	3	0	0	0	2	1	2	NI	FE	2	
		345		RTECS No	RB9450000			CAS No:							16219-75-3		
Ethyl isoamyl ketone		737	NI	NI		NI	NI	NI	0	0	(1)	1	(2)	NI	FD	2	
		2618		RTECS No	MJ7350000			CAS No:									
Ethyl methacrylate		785	1	NI	1	R	2	NI	0	0	0	(2)	(2)	S	NI	FE	2
		318		RTECS No	OZ4550000			CAS No:								97-63-2	
N-Ethylmethylallylamine		2228	0	NI	0	NR	2	NI	3	2	2	3A	3	NI	D	3	
		2417		RTECS No				CAS No:							18328-90-0		
o-Ethylphenol		788	2	NI	2	NI	(2)	NI	1	NI	NI	NI	NI	NI	S	NI	NI
		535		RTECS No	SL4025000			CAS No:								90-00-6	
Ethyl propionate		790	1	NI	1	NI	2	NI	0	(1)	(2)	2	2	NI	ED	2	
		319		RTECS No	UF3675000			CAS No:								105-37-3	
2-Ethyl-3-propylacrolein		791	2	NI	2	R	3	NI	0	0	1	3	3	NI	FE	3	
		43		RTECS No	MP6300000			CAS No:								645-62-5	
Ethyl toluene		2297	3	NI	3	NI	(3)	NI	0	0	0	2	2	NI	F	2	
		346		RTECS No				CAS No:								622-96-8	
Fatty acid (saturated C13+)		1298	5	NI	0	R	0	NI	0	(0)	(1)	(1)	(1)	NI	Fp	2	
		347		RTECS No	QH4375000			CAS No:								544-63-8	
Fatty acid methyl esters		2362	0	NI	0	R	2	NI	0	(0)	(2)	2	2	NI	Fp	2	
		3125		RTECS No				CAS No:									
Fatty acids, 12+		2261	5	0	0	(R)	0	NI	(0)	(0)	(2)	(1)	(2)	NI	NI	2	
		2780		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	0	NI	0	R	4	NI	0	0	(3)	3C	3		NI	NI	NI
	3079				<b>RTECS No</b>					<b>CAS No:</b>					68937-75-7	
Fatty acids, C8-C18	2260	(4)	NI	(4)	R	(4)	(1)	(0)	(0)	(1)	(1)	(1)		NI	Fp	3
	2779				<b>RTECS No</b>					<b>CAS No:</b>						
Fatty acids, essentially linear,C6-C18, 2-ethylhexyl ester.	2253	0	NI	0	R	1	NI	0	0	(1)	1	0		NI	Fp	2
	1914				<b>RTECS No</b>					<b>CAS No:</b>						
Fatty acids, unsaturated, linear, C16+	2259	0	0	0	R	(0)	NI	0	0	(0)	0	0		NI	Fp	2
	2778				<b>RTECS No</b>					<b>CAS No:</b>						
Fatty alcohols, C8-C10	2325	NI	NI			NI	NI	NI	(0)	(0)	(2)	(2)	(2)	NI	NI	NI
	3080				<b>RTECS No</b>					<b>CAS No:</b>						
Ferric chloride solutions	339	Inor	5	5	Inorg	2	0	1	(0)	(3)	2	3		NI	D	3
	348				<b>RTECS No</b>	LJ9100000				<b>CAS No:</b>					7705-08-0	
Ferric hydroxyethylethylenediaminetriacetic acid, trisodium salt solution	796	NI	NI	NI	NI	NI	NI	0	0	(1)	(0)	1		NI	D	1
	349				<b>RTECS No</b>					<b>CAS No:</b>						
Ferric nitrate/Nitric acid solution	337	Inor	5	5	Inorg	2	0	0	(0)	(3)	3	3		NI	D	3
	350				<b>RTECS No</b>					<b>CAS No:</b>						
Fish oil	2316	0	NI	0	R	2	NI	(0)	(0)	(1)	(0)	(1)		NI	Fp	2
	3046				<b>RTECS No</b>					<b>CAS No:</b>						
Fish oil (containing less than 4% free fatty acids)	801	0	NI	0	R	2	NI	(0)	(0)	(1)	(0)	(1)		NI	Fp	2
	2774				<b>RTECS No</b>	LK5150000				<b>CAS No:</b>					8016-13-5	
Fish solubles (water-based fish meal extract)	1509	NI	NI	NI	NI	NI	NI	(0)	(0)	(0)	(0)	(0)		NI	NI	0
	351				<b>RTECS No</b>					<b>CAS No:</b>						
Fluorosilicic acid	806	Inor	0	0	Inorg	2	NI	2	(2)	4	3	3		NI	D	3
	2716				<b>RTECS No</b>	VV8225000				<b>CAS No:</b>						
Fluorosilicic acid (20-30%) in water solution	2240	Inor	0	0	Inorg	2	NI	(1)	(1)	4	3	3		NI	D	3
	353				<b>RTECS No</b>					<b>CAS No:</b>					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	
Glycerolpolyalkoxylate		815	NI	NI		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
		366		RTECS No					CAS No:								
Glycerol propoxylated		2346	0	NI	0	NR	1	NI	1	0	(2)	1	0	NI	D	2	
		3110		RTECS No					CAS No:					25791-96-2			
Glycerol, propoxylated and ethoxylated		2276	0	NI	0	NR	1	0	0	0	0	1	1	NI	SD	2	
		2872		RTECS No					CAS No:					9082-00-2			
[Glycerol/sorbitol blend, propoxylated and ethoxylated]		2372	0	NI	0	NR	2	NI	NI	NI	NI	NI	NI	NI	NI	NI	
		3136		RTECS No					CAS No:								
[Glycerol/sucrose blend propoxylated and ethoxylated]		2361	0	NI	0	NR	1	NI	0	0	0	0	0	NI	SD	0	
		3124		RTECS No					CAS No:								
Glyceryl triacetate		816	0	NI	0	R	1	0	1	0	0	0	1	NI	D	1	
		367		RTECS No	AK3675000				CAS No:					102-76-1			
Glycidyl ester of C10 trialkylacetic acid		441	3	NI	3	NR	3	NI	0	0	(2)	2	1	NI	F	2	
		368		RTECS No					CAS No:					26761-45-5			
Glycine, sodium salt solution		817	0	NI	0	NI	0	NI	0	(0)	(1)	(0)	(1)	NI	D	1	
		369		RTECS No	MB7600000				CAS No:					6000-44-8			
Glycolic acid solution (70% or less)		2218	0	0	0	R	1	NI	1	(1)	2	3C	3	NI	D	3	
		2539		RTECS No					CAS No:					79-14-1			
Glyoxal solution (40% or less)		84	0	NI	0	R	1	NI	0	0	2	2	3	MS	NI	D	3
		370		RTECS No	MD2700000				CAS No:					107-22-2			
Glyoxylic acid solution (50 % or less)		1535	0	NI	0	R	2	0	0	0	(3)	0	3	S	NI	D	3
		371		RTECS No	MD4550000				CAS No:					298-12-4			
Glyphosate solution (not containing surfactant)		1765	0	0	0	NR	3	0	0	0	(3)	0	3	NI	D	3	
		2204		RTECS No	MC1075000				CAS No:					38641-94-0			
Groundnut oil		820	0	NI	0	R	(2)	NI	(0)	(0)	(0)	(0)	0	NI	Fp	2	
		2769		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		<b>RTECS No</b>	MI7700000				<b>CAS No:</b>						142-82-5		
n-Heptanoic acid		831	2	NI	2	R	1	NI	0	0	(3)	3B	(3)	NI	FD	3	
		479		<b>RTECS No</b>	MJ1575000				<b>CAS No:</b>						111-14-8		
1-Heptanol		828	2	NI	2	R	2	NI	1	0	2	(2)	(2)	NI	FD	(2)	
		2688		<b>RTECS No</b>	MK0350000				<b>CAS No:</b>						111-70-6		
Heptanol (all isomers) (d)		2223	2	NI	2	R	(2)	NI	0	0	(2)	(1)	(2)	NI	FD	2	
		373		<b>RTECS No</b>					<b>CAS No:</b>						111-70-6		
Heptene (all isomers)		2225	3	NI	3	NI	2	NI	(0)	(0)	(2)	(2)	(0)	NI	E	2	
		374		<b>RTECS No</b>					<b>CAS No:</b>								
1-Heptene		832	3	NI	3	NI	2	NI	(0)	(0)	(2)	(2)	(0)	NI	E	2	
		2685		<b>RTECS No</b>	MJ8815000				<b>CAS No:</b>						592-76-7		
Heptyl acetate		833	3	NI	3	NI	(3)	NI	0	0	(2)	1	2	NI	F	2	
		375		<b>RTECS No</b>	AH9901000				<b>CAS No:</b>						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		<b>RTECS No</b>					<b>CAS No:</b>								
Hexamethylenediamine adipate (50% in water)		846	0	NI	0	R	1	NI	0	(0)	(0)	0	0	NI	D	0	
		379		<b>RTECS No</b>	AV1940000				<b>CAS No:</b>						3323-53-3		
Hexamethylenediamine (molten)		845	0	NI	0	R	2	NI	1	1	(3)	3A	3	SR	NI	D	3
		378		<b>RTECS No</b>	MO1180000				<b>CAS No:</b>						124-09-4		
Hexamethylenediamine solution		845	0	NI	0	R	2	NI	1	1	(3)	3A	3	SR	NI	D	3
		380		<b>RTECS No</b>	MO1180000				<b>CAS No:</b>						124-09-4		
Hexamethylene diisocyanate		2142	3	0	0	NR	2	NI	1	2	4	3	3	S	NI	S	3
		18		<b>RTECS No</b>					<b>CAS No:</b>						822-06-0		
Hexamethylene glycol		847	0	NI	0	R	1	NI	0	0	(1)	0	1	NI	D	1	
		376		<b>RTECS No</b>	MO2100000				<b>CAS No:</b>						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	Inor	0	0	Inorg	1	NI	1	1	3	3C	3	NI	DE	3	
		389		RTECS No	MW4025000			CAS No:						7647-01-0			
Hydrogenated starch hydrolysate		2347	0	NI	0	R	0	NI	0	0	(0)	0	0	NI	D	0	
		3077		RTECS No				CAS No:						68425-17-2			
Hydrogen peroxide, more than 60%		867	Inor	0	0	Inorg	3	NI	1	0	2	3	3	NI	D	3	
		2689		RTECS No	MX0900000			CAS No:						7722-84-1			
Hydrogen peroxide solutions (over 60% but not over 70% by mass)		867	Inor	0	0	Inorg	3	NI	1	0	2	3	3	NI	D	3	
		390		RTECS No	MX0900000			CAS No:						7722-84-1			
Hydrogen peroxide solutions (over 8% but not over 60% by mass)		2231	Inor	0	0	Inorg	3	NI	1	0	(2)	3	3	NI	D	3	
		391		RTECS No				CAS No:						7722-84-1			
2-Hydroxyethyl acrylate		869	0	NI	0	R	4	NI	1	3	3	3	3	SM	NI	D	3
		51		RTECS No	AT1750000			CAS No:						818-61-1			
N-(Hydroxyethyl)ethylenediaminetriacetic acid, trisodium salt solution		870	0	NI	0	NI	1	NI	0	0	(1)	1	1	R	NI	D	3
		470		RTECS No	MB9185000			CAS No:						139-89-9			
2-Hydroxy-4-(methylthio)butanoic acid		871	1	NI	1	R	1	NI	0	0	(3)	1	3	NI	D	3	
		49		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	NI	NI	NI	NI	NI	NI	0	(0)	(2)	2	(2)	NI	Fp	2	
		392		RTECS No				CAS No:									
Illipe oil		2304	(0)	NI	(0)	(R)	(0)	NI	(0)	(0)	(0)	(0)	(0)	NI	Fp	2	
		3034		RTECS No				CAS No:									
Interesterified mixed vegetable oils		2355	0	NI	0	R	NI	NI	(0)	(0)	(1)	(1)	(1)	NI	Fp	2	
		3115		RTECS No				CAS No:									
Isoamyl alcohol		965	1	1	1	(R)	1	0	1	0	(2)	2	2	NI	FED	2	
		396		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	3	2	2	R	3	NI	0	0	0	2	1	NI	FE	2
		2687		RTECS No	GR8575000			CAS No:						98-82-8		
Isopropylcyclohexane		1199	4	NI	4	(NR)	(3)	NI	(0)	(0)	(1)	(0)	(1)	NI	FE	2
		408		RTECS No				CAS No:						696-29-7		
Isopropyl ether		711	1	NI	1	NR	2	NI	0	0	0	1	1	NI	E	2
		406		RTECS No	TZ5425000			CAS No:						108-20-3		
[Jeffamine D-230]		2352	1	NI	1	NR	1	NI	0	0	(3)	3	3	NI	NI	3
		3112		RTECS No				CAS No:								
[Jeffamine HK-511]		2353	0	NI	0	NR	2	NI	NI	NI	NI	NI	NI	NI	NI	NI
		3113		RTECS No				CAS No:						194673-87-5		
Kaolin slurry		883	Inor	NI	0	Inorg	0	NI	0	0	0	0	0	NI	S	0
		409		RTECS No	GF1670500			CAS No:						1332-58-7		
Lactic acid		886	0	NI	0	R	1	NI	0	0	(3)	2	3	NI	D	3
		410		RTECS No	OD2800000			CAS No:						50-21-5		
Lactonitrile solution (80% or less)		887	0	NI	0	R	4	NI	2	4	(4)	NI	NI	NI	D	3
		411		RTECS No	OD8225000			CAS No:						78-97-7		
Lard		2317	0	NI	0	R	0	NI	0	(0)	(1)	0	1	NI	Fp	2
		3047		RTECS No				CAS No:								
Lard (containing less than 1% free fatty acids)		888	0	NI	0	R	0	NI	0	(0)	(1)	0	1	NI	Fp	2
		412		RTECS No				CAS No:						61789-99-9		
Latex, ammonia (1% or less), inhibited		889	0	NI	0	R	(2)	NI	0	0	(1)	0	1	NI	D	1
		413		RTECS No				CAS No:								
Latex: Carboxylated styrene-Butadiene copolymer; Styrene-Butadiene rubber		1274	0	NI	0	NR	0	NI	0	0	(1)	0	1	NI	D	1
		414		RTECS No				CAS No:								
Lauric acid		891	4	NI	4	R	4	1	0	(0)	(2)	1	2	NI	Fp	2
		415		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		<b>RTECS No</b>				<b>CAS No:</b>						8030-76-0			
Ligninsulphonic acid, sodium salt solution		34	0	NI	0	(NR)	(0)	NI	0	(0)	(0)	(0)	(0)	NI	D	0	
		419		<b>RTECS No</b>				<b>CAS No:</b>						8061-51-6			
Linear alkyl (C12-C16) propoxyamine ethoxylate			NI	NI		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
		3015		<b>RTECS No</b>				<b>CAS No:</b>									
Linseed oil		2318	0	NI	0	R	(2)	NI	0	(0)	(1)	0	(1)	NI	Fp	2	
		3048		<b>RTECS No</b>				<b>CAS No:</b>									
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		<b>RTECS No</b>			OI9690000		<b>CAS No:</b>					8001-26-1			
Liquid chemical wastes			NI	NI		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
		420		<b>RTECS No</b>				<b>CAS No:</b>									
Long-chain alkaryl polyether (C11-C20)		1982	(4)	NI	(4)	NR	3	(1)	0	0	(2)	0	2	NI	Fp	2	
		421		<b>RTECS No</b>				<b>CAS No:</b>						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		<b>RTECS No</b>				<b>CAS No:</b>									
Long-chain alkylphenate/Phenol sulphide mixture		1754	(0)	NI	(0)	(NR)	0	NI	0	0	(2)	2	2	S	NI	Fp	3
		425		<b>RTECS No</b>				<b>CAS No:</b>									
Long-chain polyetheramine in alkyl (C2-C4) benzenes		1457	NI	NI	NI	NR	2	NI	0	0	(2)	2	2	NI	Fp	2	
		422		<b>RTECS No</b>				<b>CAS No:</b>									
Long-chain polyetheramine in aromatic solvent		1457	NI	NI	NI	NR	2	NI	0	0	(2)	2	2	NI	Fp	2	
		423		<b>RTECS No</b>				<b>CAS No:</b>									
L-Lysine solution (60% or less)		2199	0	0	0	R	1	0	0	0	0	1	NI	NI	D	1	
		2306		<b>RTECS No</b>				<b>CAS No:</b>						56-87-1			
Magnesium chloride solution		915	Inor	0	0	Inorg	1	0	0	0	(0)	0	0	NI	D	0	
		427		<b>RTECS No</b>			OM2800000		<b>CAS No:</b>					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	<b>RTECS No</b> OM3570000				<b>CAS No:</b>				1309-42-8						
Magnesium lignosulphonate solutions	2356	(0)	NI	(0)	(NR)	(0)	NI	0	0	(0)	(0)	(0)		NI	D	0
	3116	<b>RTECS No</b>				<b>CAS No:</b>				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	<b>RTECS No</b>				<b>CAS No:</b>				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	<b>RTECS No</b>				<b>CAS No:</b>										
Maleic anhydride	921	1	NI	1	R	2	0	1	2	(3)	3	3	S	NI	D	3
	431	<b>RTECS No</b> ON3675000				<b>CAS No:</b>				108-31-6						
Maltitol Syrup	2348	0	NI	0	R	0	NI	0	0	(0)	0	0		NI	D	0
	3078	<b>RTECS No</b>				<b>CAS No:</b>				585-88-6						
Mango kernel oil	2305	(0)	NI	(0)	(R)	(0)	NI	(0)	(0)	(0)	(0)	(0)		NI	Fp	2
	3035	<b>RTECS No</b>				<b>CAS No:</b>				167747-36-6						
Mercaptobenzothiazol, sodium salt solution	925	2	1	1	NR	4	2	0	0	(0)	0	0	S	NI	S	2
	432	<b>RTECS No</b> DL6475000				<b>CAS No:</b>				149-30-4						
Mesityl oxide	946	1	NI	1	R	(1)	NI	1	0	2	2	2		NI	D	2
	433	<b>RTECS No</b> SB4200000				<b>CAS No:</b>				141-79-7						
Metam sodium solution	202	0	NI	0	NR	5	NI	1	2	(2)	2	1	S	NI	D	2
	434	<b>RTECS No</b> FC2100000				<b>CAS No:</b>				137-42-8						
Methacrylic acid - alkoxypoly (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	<b>RTECS No</b>				<b>CAS No:</b>										
Methacrylic acid	948	0	NI	0	R	2	0	1	2	2	3	3		NI	D	3
	435	<b>RTECS No</b> OZ2975000				<b>CAS No:</b>				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	<b>RTECS No</b>				<b>CAS No:</b>										

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	4	NI	4	(NR)	(4)	NI	1	0	(2)	1	1	T	F	2	
	451	<b>RTECS No</b>				<b>CAS No:</b>											
2-Methylpentane		1000	3	NI	3	NI	4	NI	(0)	(0)	(2)	(2)	(2)	NI	E	2	
	2684	<b>RTECS No</b> SA2995000				<b>CAS No:</b>											
2-Methyl-1,3-propanediol		2200	0	0	0	NR	0	0	0	0	(0)	0	0	NI	D	0	
	2213	<b>RTECS No</b>				<b>CAS No:</b>											
Methyl propyl ketone		1003	0	NI	0	R	0	NI	1	0	(2)	1	2	NI	FED	2	
	452	<b>RTECS No</b> SA7875000				<b>CAS No:</b>											
2-Methylpyridine		1005	1	NI	1	R	1	NI	1	2	1	3A	3	NI	D	3	
	55	<b>RTECS No</b> TJ4900000				<b>CAS No:</b>											
3-Methylpyridine		1006	1	NI	1	R	1	NI	1	2	2	3	3	NI	D	3	
	61	<b>RTECS No</b> TJ5000000				<b>CAS No:</b>											
4-Methylpyridine		1007	1	NI	1	R	1	NI	1	2	2	3	3	NI	D	3	
	63	<b>RTECS No</b> UT5425000				<b>CAS No:</b>											
N-Methyl-2-pyrrolidone		1008	0	NI	0	R	1	NI	0	0	2	1	2	R	NI	D	3
	481	<b>RTECS No</b> UY5790000				<b>CAS No:</b>											
Methyl salicylate		86	2	NI	2	R	2	NI	1	1	1	2	1	R	NI	SD	3
	453	<b>RTECS No</b> VO4725000				<b>CAS No:</b>											
alpha-Methylstyrene		1010	3	3	3	NR	3	NI	0	0	1	2	1	M	(T)	FE	3
	107	<b>RTECS No</b> WL5075300				<b>CAS No:</b>											
3-(methylthio)propionaldehyde		993	0	NI	0	R	3	1	1	1	2	2	3	NS	T	D	3
	2368	<b>RTECS No</b> UE2285000				<b>CAS No:</b>											
Microsilica slurry		1514	Inor	0	0	Inorg	0	0	(0)	(0)	NI	(0)	(0)	NI	S	0	
	2507	<b>RTECS No</b>				<b>CAS No:</b>											
Molasses		1013	0	NI	0	R	0	NI	0	0	0	0	0	NI	D	0	
	462	<b>RTECS No</b>				<b>CAS No:</b>											

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	4	2	2	NR	2	0	0	0	(2)	2	2	NI	Fp	2	
	3108	<b>RTECS No</b>				<b>CAS No:</b>										
Morpholine	1018	0	0	0	R	2	NI	1	2	2	3	3	NI	D	3	
	463	<b>RTECS No</b> QD6475000				<b>CAS No:</b>										
Motor fuel anti-knock compounds (containing lead alkyls)	1303	4	5	5	NR	5	NI	3	2	4	2	2	NR	NI	S	3
	464	<b>RTECS No</b> TP4550000				<b>CAS No:</b>										
Myrcene	1019	4	NI	4	R	4	1	0	0	(2)	2	NI	NI	F	2	
	465	<b>RTECS No</b> RG5365000				<b>CAS No:</b>										
[Nalco 5740S Antifoam]	2291	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
	492	<b>RTECS No</b>				<b>CAS No:</b>										
Naphthalene (molten)	1	3	3	3	NR	4	1	1	0	(2)	1	1	C	T	S	3
	493	<b>RTECS No</b> QJ0525000				<b>CAS No:</b>										
Naphthalenesulphonic acid-Formaldehyde copolymer, sodium salt solution	1020	0	1	1	(NR)	1	NI	0	(0)	(1)	0	1	NI	D	1	
	494	<b>RTECS No</b> EC4850000				<b>CAS No:</b>										
Naphthenic acids	1021	NI	NI	NI	NI	3	NI	1	NI	NI	NI	NI	(T)	FD	NI	
	495	<b>RTECS No</b> QK8750000				<b>CAS No:</b>										
Neodecanoic acid	1025	4	NI	4	NR	2	NI	0	0	(2)	0	2	NI	Fp	2	
	496	<b>RTECS No</b>				<b>CAS No:</b>										
Nitrating acid (mixture of sulphuric and nitric acids)	289	Inor	NI	0	Inorg	(2)	NI	3	3	4	3C	3	NI	D	3	
	497	<b>RTECS No</b>				<b>CAS No:</b>										
Nitric acid (70% and over)	1029	Inor	NI	0	Inorg	2	NI	(3)	(1)	4	3C	3	NI	D	3	
	498	<b>RTECS No</b> QU5775000				<b>CAS No:</b>										
Nitric acid (less than 70%)	1029	Inor	NI	0	Inorg	2	NI	(3)	(1)	4	3C	3	NI	D	3	
	499	<b>RTECS No</b> QU5775000				<b>CAS No:</b>										
Nitrilotriacetic acid, trisodium salt solution	1030	0	NI	0	R	1	0	1	(0)	0	1	1	CMR	NI	D	3
	500	<b>RTECS No</b> MB8400000				<b>CAS No:</b>										

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3	
Nitrobenzene		1017	1	1	1	R	3	(4)	(2)	2	2	1	1	CRT	NI	SD	3
		501				RTECS No	DA6475000			CAS No:							98-95-3
Nitroethane		1037	0	NI	0	NR	2	NI	1	0	(2)	(0)	(1)		NI	SD	2
		502				RTECS No	KI5600000			CAS No:							79-24-3
Nitroethane(80%)/ Nitropropane(20%)		2245	0	1	1	NR	2	NI	1	1	2	0	1		NI	E	2
		503				RTECS No				CAS No:							
Nitroethane, 1-Nitropropane (each 15% or more) mixture		2270	(0)	(1)	(1)	(NR)	(2)	NI	1	1	2	0	1		NI	FED	2
		2212				RTECS No				CAS No:							
o-Nitrophenol (molten)		1041	1	2	2	R	3	(2)	0	0	(1)	1	1		NI	S	1
		536				RTECS No	SM2100000			CAS No:							88-75-5
1-Nitropropane		1044	(0)	(1)	(1)	(NR)	(2)	NI	1	0	2	0	1		NI	FED	2
		2747				RTECS No	TZ5075000			CAS No:							108-03-2
1- or 2-Nitropropane		2242	0	1	1	NR	1	NI	2	0	2	0	1	C	NI	FED	3
		20				RTECS No				CAS No:							108-03-2
2-Nitropropane		1045	(0)	(1)	(1)	(NR)	(2)	NI	2	0	2	0	0	C	NI	FED	3
		2748				RTECS No	TZ5250000			CAS No:							
Nitropropane (60%)/Nitroethane (40%) mixture		1046	0	1	1	NR	2	NI	1	0	2	0	1	C	NI	FED	3
		504				RTECS No				CAS No:							
o-Nitrotoluene		1049	2	2	2	NR	2	(1)	1	0	(2)	0	1	CMR	NI	S	3
		2745				RTECS No	XT3150000			CAS No:							88-72-2
p-Nitrotoluene		1051	2	1	1	NR	3	0	1	0	(2)	0	1	R	NI	S	3
		2746				RTECS No	XT3325000			CAS No:							99-99-0
o- or p-Nitrotoluenes		2241	2	2	2	NR	3	(1)	1	0	(2)	0	1	CMR	NI	S	3
		532				RTECS No				CAS No:							88-72-2
Nonane (all isomers)		1054	4	NI	4	R	4	NI	0	0	1	0	0	A	NI	FE	2
		506				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	3	NI	3	R	2	NI	0	0	(3)	2	3	NI	F	3	
		507		RTECS No	RA6650000			CAS No:						112-05-0			
Nonene (all isomers)		2222	4	NI	4	NI	3	NI	0	0	0	1	1	A	NI	FE	2
		508		RTECS No				CAS No:						27215-95-8			
1-Nonene		1060	4	NI	4	NI	3	NI	0	0	0	1	1	A	NI	FE	2
		2680		RTECS No				CAS No:						124-11-8			
Nonyl acetate		1766	4	NI	4	NI	NI	NI	0	0	NI	NI	NI	NI	F	NI	
		509		RTECS No				CAS No:						143-13-5			
Nonyl alcohol (all isomers)		1059	3	NI	3	NR	3	1	0	0	(2)	2	2	NI	Fp	2	
		510		RTECS No	RH1400000			CAS No:						2430-22-0			
Nonyl methacrylate monomer		1061	5	NI	5	R	3	NI	(0)	(0)	(1)	(1)	(1)	NI	F	1	
		511		RTECS No				CAS No:						2696-43-7			
Nonylphenol		1062	5	4	4	NR	5	3	1	0	(3)	3	3	NI	FD	3	
		512		RTECS No	SM5600000			CAS No:						25154-52-3			
Nonylphenol poly(4+)ethoxylate		1063	4	NI	4	NR	3	1	0	0	(2)	2	1	NI	D	2	
		513		RTECS No				CAS No:									
Octane (all isomers)		1072	5	NI	5	(R)	4	NI	(0)	(0)	0	0	0	A	NI	FE	2
		538		RTECS No	RG8400000			CAS No:						111-65-9			
Octanoic acid (all isomers)		1074	3	NI	3	R	1	NI	0	0	(3)	3	3	NI	F	3	
		539		RTECS No	RH0175000			CAS No:						124-07-2			
Octanol (all isomers)		1075	3	NI	3	R	2	0	1	0	(2)	2	2	NI	Fp	2	
		540		RTECS No	RH6550000			CAS No:						111-87-5			
1-Octanol		1075	3	NI	3	R	2	0	1	0	(2)	2	2	NI	Fp	2	
		2676		RTECS No	RH6550000			CAS No:						111-87-5			
iso-Octanol		1076	3	NI	3	R	2	0	1	0	(2)	2	(2)	NI	F	2	
		2675		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	5	2	(2)	NR	1	NI	0	0	(1)	1	1		NI	FE	2
	2825	<b>RTECS No</b>				<b>CAS No:</b>										
Palm acid oil	2307	(0)	NI	(0)	(R)	(0)	NI	0	(0)	(1)	0	1		NI	Fp	2
	3037	<b>RTECS No</b>				<b>CAS No:</b>										68440-15-3
Palm fatty acid distillate	2310	NI	NI	(0)	(R)	(0)	NI	0	(0)	(1)	0	1		NI	Fp	2
	3040	<b>RTECS No</b>				<b>CAS No:</b>										
Palm kernel acid oil	1095	0	NI	0	R	(3)	NI	0	0	(2)	1	2		NI	Fp	2
	553	<b>RTECS No</b>				<b>CAS No:</b>										8023-79-8
Palm kernel fatty acid distillate	2335	(4)	0	0	R	(3)	NI	0	(0)	(2)	1	2		NI	NI	NI
	3089	<b>RTECS No</b>				<b>CAS No:</b>										
Palm kernel oil	1094	0	NI	0	R	(2)	NI	(0)	(0)	(1)	(0)	(1)		NI	Fp	2
	2766	<b>RTECS No</b>				<b>CAS No:</b>										8023-79-8
Palm kernel olein	2308	(0)	NI	(0)	(R)	1	NI	(0)	(0)	(0)	(0)	(0)		Ni	Fp	2
	3038	<b>RTECS No</b>				<b>CAS No:</b>										
Palm kernel stearin	2309	0	(0)	(0)	(R)	0	NI	(0)	(0)	(0)	(0)	(0)		NI	Fp	2
	3039	<b>RTECS No</b>				<b>CAS No:</b>										
Palm Mid Fraction	2363	(0)	NI	(0)	(R)	(0)	NI	0	0	(0)	(0)	(0)		NI	Fp	2
	3126	<b>RTECS No</b>				<b>CAS No:</b>										
Palm oil	2249	0	NI	0	R	0	NI	0	(0)	(0)	0	0		NI	Fp	2
	2764	<b>RTECS No</b>				<b>CAS No:</b>										8023-79-8
Palm oil (containing less than 15% free fatty acids)	2319	0	NI	0	R	0	NI	0	(0)	(1)	(0)	(1)		NI	Fp	2
	3049	<b>RTECS No</b>				<b>CAS No:</b>										
Palm oil (containing more than 15% and less than 30% free fatty acids)	2364	0	NI	0	R	0	NI	0	0	(2)	(2)	(2)		NI	Fp	2
	3127	<b>RTECS No</b>				<b>CAS No:</b>										8002-75-3
Palm oil fatty acid methyl ester	1097	0	NI	0	R	0	NI	(0)	(0)	(0)	(0)	(1)		NI	Fp	2
	554	<b>RTECS No</b>				<b>CAS No:</b>										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		<b>RTECS No</b>				<b>CAS No:</b>						8023-79-8			
Palm stearin		2251	0	NI	0	R	0	NI	0	(0)	(0)	0	0	NI	Fp	2	
		555		<b>RTECS No</b>				<b>CAS No:</b>						8002-75-3			
Paraffin wax		1086	0	NI	0	R	0	NI	(0)	(0)	(1)	1	1	NI	Fp	2	
		556		<b>RTECS No</b>			RV0350000	<b>CAS No:</b>						8002-74-2			
Paraldehyde		1098	0	0	0	NR	0	NI	1	0	0	1	3	NI	D	3	
		557		<b>RTECS No</b>			YK0525000	<b>CAS No:</b>						123-63-7			
Paraldehyde-ammonia reaction product		2131	1	NI	1	R	2	NI	2	1	(3)	3B	3	NI	FED	3	
		1989		<b>RTECS No</b>				<b>CAS No:</b>						68391-11-7			
Pentachloroethane		1099	3	2	2	NI	3	1	1	(1)	1	(1)	(1)	CT	NI	S	3
		558		<b>RTECS No</b>			KI6300000	<b>CAS No:</b>						76-01-7			
1,3-Pentadiene		1102	2	NI	2	NI	2	NI	0	0	0	1	(2)	NI	E	2	
		14		<b>RTECS No</b>			RZ2464000	<b>CAS No:</b>						504-60-9			
Pentaethylenehexamine		1103	0	NI	0	NI	4	NI	1	(2)	(3)	3	(3)	S	NI	D	3
		560		<b>RTECS No</b>			RZ2680000	<b>CAS No:</b>						4067-16-7			
Pentane (all isomers)		1105	3	NI	3	R	3	NI	0	0	0	1	1	NI	E	2	
		561		<b>RTECS No</b>			RZ9450000	<b>CAS No:</b>						109-66-0			
Pentanoic acid		1109	1	NI	1	NI	2	NI	1	2	(3)	3	3	NI	FD	3	
		562		<b>RTECS No</b>			YV6100000	<b>CAS No:</b>						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		<b>RTECS No</b>				<b>CAS No:</b>									
Pentene (all isomers)		1992	2	NI	2	NI	(2)	NI	(0)	(0)	(0)	(0)	(1)	NI	E	2	
		563		<b>RTECS No</b>				<b>CAS No:</b>									
1-Pentene		1114	2	NI	2	NI	(2)	NI	(0)	(0)	0	(0)	(1)	NI	E	2	
		2679		<b>RTECS No</b>				<b>CAS No:</b>						109-67-1			

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
2-Pentene		1115	2	NI	2	NI	2	NI	(0)	(0)	(1)	(0)	(1)	NI	E	2
		2678		RTECS No				CAS No:							109-68-2	
iso-Pentene		1113	2	NI	2	NI	2	NI	(0)	(0)	(0)	(0)	(1)	NI	E	2
		2677		RTECS No	EM7600000			CAS No:							563-45-1	
n-Pentyl propionate		1484	2	NI	2	R	2	NI	0	0	(2)	2	1	NI	F	2
		484		RTECS No				CAS No:							624-54-4	
Peracetic acid		1116	NI	NI		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		2694		RTECS No	SD8750000			CAS No:								
Perchloroethylene		1295	3	2	2	NR	(3)	2	0	0	0	2	1	C	NI	S
		564		RTECS No	KX3850000			CAS No:							127-18-4	
Petrolatum		2244	0	NI	0	NR	0	NI	0	0	2	1	1	NI	Fp	2
		565		RTECS No				CAS No:							8002-74-2	
Phenol		1124	1	2	2	R	3	0	2	2	(3)	3	3	NT	S	3
		566		RTECS No	SJ3325000			CAS No:							108-95-2	
1-Phenyl-1-xylyl ethane		1135	5	4	4	NR	(2)	NI	1	0	(1)	(0)	0	NI	F	1
		23		RTECS No	CZ7300000			CAS No:							40766-31-2	
Phosphate esters, alkyl (C12-C14) amine		1854	2	NI	2	NR	3	NI	0	(0)	(2)	1	2	NI	FD	2
		1345		RTECS No				CAS No:								
Phosphoric acid		1138	Inor	NI	INORG	Inorg	1	NI	(3)	(3)	3	3	3	NI	D	3
		567		RTECS No	TB6300000			CAS No:							7664-38-2	
Phosphorus, yellow or white		1139	Inor	(3)	(3)	Inorg	6	4	0	0	0	2	1	NI	S	2
		568		RTECS No	TH3500000			CAS No:							7723-14-0	
Phthalic anhydride (molten)		1146	1	NI	1	R	2	0	1	0	(3)	1	3	S	NI	S
		569		RTECS No	TI3150000			CAS No:							85-44-9	
alpha-Pinene		40	4	NI	4	NI	4	NI	0	0	0	1	(1)	S	T	F
		109		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	Inorg	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	0	NI	0	NR	1	NI	0	(0)	(0)	0	0	NI	Fp	2	
	587	<b>RTECS No</b>				<b>CAS No:</b>				25322-68-3							
Polyetheramine		NI	NI		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
	2946	<b>RTECS No</b>				<b>CAS No:</b>											
Polyether, borated		1863	0	NI	0	NR	3	NI	0	(0)	(1)	1	0	NI	D	1	
	572	<b>RTECS No</b>				<b>CAS No:</b>											
Polyethylene glycol		1157	0	NI	0	NR	0	NI	0	0	0	1	1	NI	D	1	
	589	<b>RTECS No</b>				TQ3500000				<b>CAS No:</b>				25322-68-3			
Polyethylene glycol dimethyl ether		1158	0	NI	0	NR	0	NI	0	0	(1)	1	(1)	NI	D	1	
	590	<b>RTECS No</b>				MC9630000				<b>CAS No:</b>				24991-55-7			
Polyethylene polyamines		2367	0	NI	0	NR	3	0	1	0	(3)	2	(3)	S	NI	D	0
	3131	<b>RTECS No</b>				<b>CAS No:</b>				68131-73-7							
Polyethylene polyamines (more than 50% C5 -C20 paraffin oil)]		1991	(5)	NI	(5)	NR	3	0	0	(1)	(3)	(2)	(3)	S	NI	Fp	0
	591	<b>RTECS No</b>				<b>CAS No:</b>											
Polyferric sulphate solution		338	Inor	0	0	Inorg	(2)	NI	1	(1)	(3)	3	(3)	NI	D	3	
	592	<b>RTECS No</b>				<b>CAS No:</b>											
Polyglycerin, sodium salt solution (containing less than 3% sodium hydroxide)		1874	0	NI	0	R	0	NI	0	0	(3)	(2)	3	NI	D	3	
	593	<b>RTECS No</b>				<b>CAS No:</b>											
Polyglycerol		1511	NI	NI	NI	NI	NI	NI	0	(0)	(0)	(0)	(0)	NI	D	0	
	594	<b>RTECS No</b>				<b>CAS No:</b>				25618-55-7							
Poly(iminoethylene)-graft-N-poly(ethyleneoxy) solution (90% or less)		2287	0	0	0	NR	0	NI	0	0	(1)	0	1	NI	D	1	
	2537	<b>RTECS No</b>				<b>CAS No:</b>				68130-99-4							
Polyisobutamine in aliphatic (C10-C14) solvent		2192	0	0	0	NR	2	NI	0	(0)	(2)	2	1	NI	FED	2	
	2374	<b>RTECS No</b>				<b>CAS No:</b>											
Polyisobutetyl anhydride adduct		2127	0	NI	0	NR	0	NI	0	0	(1)	0	1	NI	FD	1	
	2256	<b>RTECS No</b>				<b>CAS No:</b>											

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Poly(4+)isobutylene	2264	0	NI	0	NR	0	NI	(0)	(0)	(0)	(0)	(0)	NI	Fp	2	
	578	<b>RTECS No</b>				<b>CAS No:</b>				629-73-2						
Polymethylene polyphenyl isocyanate	1153	NI	(2)	(2)	NR	0	0	0	0	(2)	2	2	S	NI	S	2
	595	<b>RTECS No</b>				<b>TR0350000</b>				<b>CAS No:</b>				9016-87-9		
Polyolefin (molecular weight 300+)	1968	0	NI	0	NR	0	NI	0	0	0	0	0	NI	Fp	2	
	596	<b>RTECS No</b>				<b>CAS No:</b>										
Polyolefin amide alkeneamine (C17+)	2104	5	NI	5	NR	0	NI	0	0	(1)	1	(1)	NI	Fp	2	
	597	<b>RTECS No</b>				<b>CAS No:</b>										
Polyolefin amide alkeneamine borate (C28-C250)	1970	0	NI	0	NR	0	NI	0	0	(0)	0	(0)	NI	Fp	2	
	600	<b>RTECS No</b>				<b>CAS No:</b>										
Polyolefin amide alkeneamine/molybdenum oxysulphide mixture	2256	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
	603	<b>RTECS No</b>				<b>CAS No:</b>										
Polyolefin amide alkeneamine polyol	1989	0	NI	0	NI	0	NI	0	0	(0)	0	(0)	NI	NI	0	
	602	<b>RTECS No</b>				<b>CAS No:</b>										
Poly (17+) olefin amine	2049	0	NI	0	NR	2	NI	0	(0)	(1)	(1)	(1)	NI	Fp	2	
	571	<b>RTECS No</b>				<b>CAS No:</b>				98761-78-5						
Polyolefinamine (C28-C250)	2107	0	NI	0	NR	2	NI	0	(0)	(2)	2	(1)	NI	Fp	2	
	609	<b>RTECS No</b>				<b>CAS No:</b>										
Polyolefinamine in alkyl (C2-C4) benzenes	2107	0	NI	0	NR	2	NI	0	(0)	(2)	2	(1)	NI	Fp	2	
	610	<b>RTECS No</b>				<b>CAS No:</b>										
Polyolefinamine in aromatic solvent	2107	0	NI	0	NR	2	NI	0	(0)	(2)	2	(1)	NI	Fp	2	
	611	<b>RTECS No</b>				<b>CAS No:</b>										
Polyolefin aminoester salts (molecular weight 2000+)	2095	0	NI	0	NR	1	NI	0	0	(1)	1	(1)	NI	Fp	2	
	604	<b>RTECS No</b>				<b>CAS No:</b>										
Polyolefin anhydride	1865	0	NI	0	NR	1	NI	0	0	(2)	1	(2)	NI	Fp	2	
	605	<b>RTECS No</b>				<b>CAS No:</b>				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	0	NI	0	NR	0	NI	0	0	(0)	0	0	NI	Fp	2
		606		<b>RTECS No</b>				<b>CAS No:</b>								
Polyolefin phenolic amine (C28-C250)		1980	0	NI	0	NI	0	NI	0	0	(1)	(1)	(1)	NI	Fp	2
		607		<b>RTECS No</b>				<b>CAS No:</b>								
Polyolefin phosphorosulphide, barium derivative (C28-C250)		1976	0	NI	0	NI	2	NI	0	(0)	(0)	(0)	NI	S	0	
		608		<b>RTECS No</b>				<b>CAS No:</b>								
Poly(20)oxyethylene sorbitan monooleate		1442	3	NI	3	NI	(3)	NI	0	(0)	(1)	0	1	NI	D	1
		577		<b>RTECS No</b>			WG2932500	<b>CAS No:</b>						9005-65-6		
Polyoxypropylene diamine			NI	NI		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		2824		<b>RTECS No</b>				<b>CAS No:</b>						9046-10-0		
Polyoxypropylene diamine (mw 2000)			NI	NI		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		3014		<b>RTECS No</b>				<b>CAS No:</b>								
Poly(5+)propylene		1512	0	NI	0	NR	(0)	NI	(0)	(0)	(0)	(0)	(0)	NI	F	1
		579		<b>RTECS No</b>			UD1842000	<b>CAS No:</b>						9003-07-0		
Polypropylene glycol		1159	0	NI	0	(NR)	1	NI	1	0	(1)	1	1	NI	D	1
		612		<b>RTECS No</b>			TR6125000	<b>CAS No:</b>						25322-69-4		
Polysiloxane		1161	NI	4	4	NI	2	NI	0	(0)	(0)	0	0	NI	F	1
		613		<b>RTECS No</b>				<b>CAS No:</b>								
Poly(tetramethylene ether) glycol (mw 600-3000)		2147	2	NI	2	NI	3	NI	0	NI	1	2	1	NI	FD	2
		2540		<b>RTECS No</b>				<b>CAS No:</b>								
Potassium chloride brine		2345	Inor	0	0	Inorg	1	0	0	(0)	(1)	0	0	NI	D	0
		3109		<b>RTECS No</b>				<b>CAS No:</b>						7447-40-7		
Potassium chloride solution (10% or more)		1513	Inor	0	0	Inorg	1	0	0	(0)	(1)	0	1	NI	D	0
		614		<b>RTECS No</b>			TS8050000	<b>CAS No:</b>						7447-40-7		
Potassium formate solutions		2121	0	NI	0	R	0	NI	(0)	(0)	(2)	2	2	NI	D	2
		615		<b>RTECS No</b>			LQ9625000	<b>CAS No:</b>						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	Inor	0	0	Inorg	2	NI	2	(2)	(3)	3C	3	NI	D	3	
		616	<b>RTECS No</b> TT2100000				<b>CAS No:</b>				1310-58-3						
Potassium oleate		1497	3	NI	3	R	4	NI	(0)	(0)	(1)	1	1	NI	FD	1	
		617	<b>RTECS No</b> RK1150000				<b>CAS No:</b>				143-18-0						
Potassium salt of polyolefin acid		1895	NI	NI	NI	NR	0	NI	0	0	(0)	0	0	NI	NI	0	
		2199	<b>RTECS No</b>				<b>CAS No:</b>										
Potassium thiosulphate (50% or less)		2152	Inor	0	0	Inorg	2	NI	0	0	(2)	2	(2)	NI	D	2	
		2335	<b>RTECS No</b>				<b>CAS No:</b>				10294-66-3						
n-Propanolamine		1183	0	NI	0	R	2	NI	0	1	(3)	3	3	NI	D	3	
		485	<b>RTECS No</b> UA5600000				<b>CAS No:</b>				156-87-6						
beta-Propiolactone		1184	0	NI	0	R	(2)	NI	2	(2)	4	3B	3	CM	NI	D	3
		142	<b>RTECS No</b> RQ7350000				<b>CAS No:</b>				57-57-8						
Propionaldehyde		1185	0	NI	0	R	2	NI	1	0	1	2	2	NI	DE	2	
		619	<b>RTECS No</b> UE0350000				<b>CAS No:</b>				123-38-6						
Propionic acid		1186	0	NI	0	R	2	NI	0	0	(3)	3B	3	NI	D	3	
		620	<b>RTECS No</b> UE5950000				<b>CAS No:</b>				79-09-4						
Propionic anhydride		1187	0	NI	0	R	2	NI	0	0	(3)	2	3	NI	FD	3	
		621	<b>RTECS No</b> UF9100000				<b>CAS No:</b>				123-62-6						
Propionitrile		1188	0	NI	0	NI	0	NI	3	3	4	1	2	R	NI	D	3
		622	<b>RTECS No</b> UF9625000				<b>CAS No:</b>				107-12-0						
n-Propyl acetate		1191	1	NI	1	R	2	NI	0	0	0	1	1	NI	ED	1	
		487	<b>RTECS No</b> AJ3675000				<b>CAS No:</b>				109-60-4						
n-Propyl alcohol		1180	0	NI	0	R	0	NI	1	0	0	1	2	R	NI	D	3
		488	<b>RTECS No</b> UH8225000				<b>CAS No:</b>				71-23-8						
n-Propylamine		1194	0	NI	0	NI	1	NI	2	2	3	3	3	NI	DE	3	
		490	<b>RTECS No</b> UH9100000				<b>CAS No:</b>				107-10-8						

Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3	
Propylbenzene		1196	NI	NI		NI	3	NI	NI	NI	NI	NI	NI	(T)	FE	NI	
		2686		RTECS No	DA8750000			CAS No:							103-65-1		
Propylbenzene (all isomers)		1197	3	2	2	R	3	NI	0	0	0	2	1	NI	FE	2	
		623		RTECS No	GR8575000			CAS No:							98-82-8		
n-Propyl chloride		1198	2	NI	2	NI	1	NI	0	NI	NI	NI	NI	NI	FED	2	
		489		RTECS No	TX4400000			CAS No:							540-54-5		
Propylene-Butylene copolymer		1508	NI	NI	NI	NI	NI	NI	(0)	(0)	(0)	(0)	(0)	NI	NI	0	
		633		RTECS No				CAS No:									
Propylene carbonate		2056	0	NI	0	R	0	NI	0	0	(3)	2	3	NI	D	3	
		624		RTECS No	FF9650000			CAS No:							108-32-7		
Propylene dimer		1201	3	NI	3	R	3	NI	NI	NI	NI	NI	NI	NI	E	2	
		625		RTECS No				CAS No:									
Propylene glycol		1202	0	NI	0	R	0	0	0	0	(1)	0	1	NI	D	1	
		626		RTECS No	TY2000000			CAS No:							57-55-6		
Propylene glycol methyl ether acetate		1759	0	NI	0	NR	1	NI	0	0	0	0	1	NI	D	1	
		627		RTECS No	AI8925000			CAS No:							108-65-6		
Propylene glycol monoalkyl ether		1958	0	NI	0	NR	0	NI	0	1	0	2	3	NI	D	3	
		628		RTECS No				CAS No:							111-35-3		
Propylene glycol phenyl ether		2057	1	NI	1	NI	1	NI	0	0	(1)	(1)	(1)	NI	SD	1	
		629		RTECS No	UB8886000			CAS No:									
Propylene oxide		76	0	NI	0	R	2	NI	1	1	2	2	3	CMR	NI	DE	3
		630		RTECS No	TZ2975000			CAS No:							75-56-9		
Propylene tetramer		2255	4	NI	4	NR	(4)	NI	(0)	(0)	(1)	(1)	(1)	NI	F	1	
		631		RTECS No				CAS No:							6842-15-5		
Propylene trimer		1207	5	4	4	NR	3	2	(0)	(0)	(1)	(1)	(1)	NI	FE	2	
		632		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	0	NI	0	R	3	0	1	1	2	1	3	NT	D	3	
		634		RTECS No	UR8400000			CAS No:						110-86-1			
Pyrolysis gasoline (containing benzene)		2271	(4)	(3)	(3)	(R)	(3)	(1)	1	0	(2)	2	2	TCM	NI	FE	3
		1990		RTECS No				CAS No:									
Rapeseed oil		2315	0	NI	0	R	(2)	NI	(0)	(0)	(0)	(1)	(1)	Ni	Fp	2	
		3045		RTECS No				CAS No:									
Rape seed oil fatty acid methyl esters		2209	0	0	0	R	0	NI	0	(0)	(1)	1	1	NI	Fp	2	
		2576		RTECS No				CAS No:						67762-38-3			
Rice bran oil		2312	(0)	NI	(0)	(R)	(0)	NI	0	(0)	(1)	0	1	NI	Fp	2	
		3043		RTECS No				CAS No:						68553-81-1			
Rosin		1219	3	NI	3	NR	3	NI	0	0	2	(1)	1	S	NI	S	2
		635		RTECS No				CAS No:						8050-09-7			
Rosin soap (disproportionated) solution		1220	3	NI	3	NR	3	NI	0	NI	NI	NI	NI	NI	S	NI	NI
		636		RTECS No				CAS No:									
Safflower oil		1222	(0)	NI	(0)	(R)	(0)	NI	(0)	(0)	(1)	1	1	0	Fp	2	
		3041		RTECS No	VN2230000			CAS No:									
Shea butter		2311	(0)	NI	(0)	NR	(0)	NI	(0)	(0)	(1)	(0)	(1)	NI	Fp	2	
		3042		RTECS No				CAS No:						91080-23-8			
Sodium acetate solutions		1498	0	NI	0	R	0	NI	0	0	0	1	1	NI	D	1	
		639		RTECS No	AJ4375000			CAS No:						127-09-3			
Sodium alkyl (C14-C17) sulphonates (60-65% solution)		334	2	2	2	R	3	1	0	0	(2)	2	2	NI	D	2	
		1153		RTECS No				CAS No:						85711-69-9			
Sodium aluminate solution		1234	Inor	0	0	Inorg	NI	NI	(0)	(0)	(3)	(3)	(3)	NI	D	3	
		641		RTECS No	BD1600000			CAS No:						11138-49-1			
Sodium aluminosilicate slurry		1235	Inor	0	0	Inorg	1	0	0	0	0	1	1	NI	S	1	
		643		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	0	NI	0	R	1	NI	0	(0)	(1)	0	1	NI	D	1	
		644		RTECS No	DH6650000			CAS No:							532-32-1		
Sodium borohydride (15% or less)/Sodium hydroxide solution		1239	Inor	0	0	Inorg	2	NI	(2)	(1)	(3)	(3)	(3)	NI	D	3	
		645		RTECS No				CAS No:									
Sodium carbonate solution		1243	Inor	0	0	Inorg	1	NI	0	0	3	1	2	NI	SD	2	
		646		RTECS No	VZ4050000			CAS No:							497-19-8		
Sodium chlorate solution (50% or less)		1244	Inor	0	0	Inorg	1	NI	1	0	(2)	1	1	S	NI	D	2
		647		RTECS No	FO0525000			CAS No:							7775-09-9		
Sodium dichromate solution (70% or less)		487	Inor	0	0	Inorg	2	1	2	2	4	2	3	CMS	NI	D	3
		649		RTECS No	HX7700000			CAS No:							10588-01-9		
Sodium hydrogen sulphide (6% or less)/Sodium carbonate (3% or less) solution		2262	Inor	NI	Inorg	Inorg	1	NI	0	0	0	0	1	NI	D	1	
		650		RTECS No				CAS No:							16721-80-5		
Sodium hydrogen sulphite solution (45% or less)		1251	Inor	0	0	Inorg	1	NI	0	(0)	(0)	0	0	NI	D	0	
		651		RTECS No	VZ2000000			CAS No:							7631-90-5		
Sodium hydrosulphide/Ammonium sulphide solution		1253	Inor	0	0	Inorg	3	NI	1	1	0	2	2	NI	D	2	
		653		RTECS No				CAS No:									
Sodium hydrosulphide solution (45% or less)		1252	Inor	0	0	Inorg	1	NI	1	1	1	2	2	NI	D	2	
		652		RTECS No	WE1900000			CAS No:							16721-80-5		
Sodium hydroxide solution		1254	Inor	0	0	Inorg	2	NI	1	1	(3)	3C	3	NI	D	3	
		654		RTECS No	WB4900000			CAS No:							1310-73-2		
Sodium hypochlorite solution (15% or less)		1256	Inor	0	0	Inorg	(4)	(1)	0	0	1	3	3	S	NI	D	3
		2785		RTECS No	NH3486300			CAS No:							7681-52-9		
Sodium hypochlorite solution (Full strength solution)		1255	Inor	0	0	Inorg	5	2	0	0	1	3	3	S	NI	D	3
		655		RTECS No	NH3486300			CAS No:							7681-52-9		
Sodium nitrate		1259	Inor	0	0	Inorg	0	NI	(0)	(0)	(0)	(1)	(1)	NI	SD	1	
		656		RTECS No	WC5600000			CAS No:							7631-99-4		

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	<b>RTECS No</b> RA1225000				<b>CAS No:</b>				7632-00-0						
Sodium nitrite solution		340	Inor	0	0	Inorg	3	0	2	(2)	2	0	1	NI	SD	2	
		658	<b>RTECS No</b> RA1225000				<b>CAS No:</b>				7632-00-0						
Sodium perborate monohydrate		2284	Inor	NI	NI	Inorg	3	NI	1	0	(3)	2	3	NI	NI	3	
		2948	<b>RTECS No</b>				<b>CAS No:</b>				11138-47-9						
Sodium petroleum sulphonate		1860	0	NI	0	(NR)	2	NI	0	(0)	(2)	1	2	S	NI	S	2
		660	<b>RTECS No</b>				<b>CAS No:</b>				68608-26-4						
Sodium poly(4+)acrylate solutions		1487	0	NI	0	NR	1	0	0	(0)	(1)	1	1	NI	D	1	
		826	<b>RTECS No</b>				<b>CAS No:</b>				9003-04-7						
Sodium silicate solution		1262	Inor	0	0	Inorg	2	NI	1	0	(3)	3	3	NI	D	3	
		661	<b>RTECS No</b>				<b>CAS No:</b>				1344-09-8						
Sodium sulphate solutions		1499	Inor	0	0	Inorg	0	0	0	(0)	(1)	1	1	NI	SD	1	
		662	<b>RTECS No</b> WE1650000				<b>CAS No:</b>				7757-82-6						
Sodium sulphide (solid)		2263	NI	NI		NI	NI	NI	NI	NI	NI	NI	NI	NI	SD	NI	
		2786	<b>RTECS No</b>				<b>CAS No:</b>				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	<b>RTECS No</b> WE1905000				<b>CAS No:</b>				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	<b>RTECS No</b> WE2150000				<b>CAS No:</b>				7757-83-7						
Sodium tartrates/Sodium succinates solution		1771	NI	1	1	NI	1	NI	0	NI	NI	NI	NI	NI	D	NI	
		665	<b>RTECS No</b>				<b>CAS No:</b>										
Sodium thiocyanate solution (56% or less)		1264	Inor	0	0	Inorg	2	NI	1	(0)	(1)	0	0	NI	D	1	
		667	<b>RTECS No</b> XL2275000				<b>CAS No:</b>				540-72-7						
Sorbitol solution		1265	0	NI	0	R	0	NI	0	(0)	(0)	(0)	(0)	NI	D	0	
		668	<b>RTECS No</b> LZ4290000				<b>CAS No:</b>				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		<b>RTECS No</b>				<b>CAS No:</b>									
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		<b>RTECS No</b>			WG4862000	<b>CAS No:</b>						8001-22-7			
Styrene monomer		1273	3	(2)	3	R	3	NI	1	0	2	2	2	CM	NI	FE	3
		669		<b>RTECS No</b>			WL3675000	<b>CAS No:</b>						100-42-5			
Sulphohydrocarbon (C3-C88)		1972	4	NI	4	NR	2	NI	0	0	0	0	0	NI	Fp	2	
		672		<b>RTECS No</b>				<b>CAS No:</b>						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		<b>RTECS No</b>				<b>CAS No:</b>									
Sulpholane		1277	0	1	1	NR	2	0	1	0	0	1	2	NI	SD	2	
		673		<b>RTECS No</b>			XN0700000	<b>CAS No:</b>						126-33-0			
Sulphonated polyacrylate solution		1760	NI	0	0	NI	0	NI	(0)	(0)	(0)	(0)	(0)	NI	D	0	
		674		<b>RTECS No</b>				<b>CAS No:</b>									
Sulphur (molten)		906	Inor	0	0	Inorg	0	NI	0	0	(1)	1	1	NI	S	1	
		675		<b>RTECS No</b>			WS4250000	<b>CAS No:</b>						7704-34-9			
Sulphuric acid		1280	Inor	NI	Inorg	Inorg	2	NI	(3)	(3)	4	3C	3	C	NI	D	3
		676		<b>RTECS No</b>			WS5600000	<b>CAS No:</b>						7664-93-9			
Sulphuric acid, spent		1280	Inor	NI	Inorg	Inorg	2	NI	(3)	(3)	4	3C	3	C	NI	D	3
		677		<b>RTECS No</b>			WS5600000	<b>CAS No:</b>						7664-93-9			
Sulphurized fat (C14-C20)		1853	0	NI	0	NR	1	NI	0	(0)	(1)	0	(1)	NI	FD	1	
		2257		<b>RTECS No</b>				<b>CAS No:</b>									
Sulphurized polyolefinamide alkene (C28-C250) amine		1855	0	NI	0	NR	0	NI	0	0	(0)	0	0	NI	FD	0	
		2258		<b>RTECS No</b>				<b>CAS No:</b>									
Sunflower seed oil		1283	0	NI	0	R	0	NI	(0)	(0)	(1)	(0)	(1)	NI	Fp	2	
		2782		<b>RTECS No</b>				<b>CAS No:</b>						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	(4)	NI	(4)	(R)	(2)	NI	0	0	(0)	0	0	S	NI	Fp	2
		678				RTECS No				CAS No:							8002-26-4
Tall oil crude		2357	4	NI	4	R	2	NI	0	0	(0)	0	0	S	NI	Fp	2
		3118				RTECS No				CAS No:							8002-26-4
Tall oil distilled		2283	0	NI	0	R	0	NI	0	(0)	(0)	0	(0)		NI	Fp	2
		2890				RTECS No				CAS No:							8002-26-4
Tall oil fatty acid (resin acids less than 20%)		1287	0	0	0	R	0	NI	0	0	(1)	1	1		NI	Fp	2
		679				RTECS No				CAS No:							61790-12-3
Tall oil fatty acid, barium salt		1864	NI	NI	NI	NI	NI	NI	(1)	(0)	(2)	1	2		NI	S	2
		680				RTECS No				CAS No:							
Tall oil pitch		2323	3	NI	3	NR	0	NI	0	0	(0)	0	(0)	S	NI	Fp	2
		3051				RTECS No				CAS No:							8016-81-7
Tall oil soap (disproportionated) solution		1286	NI	NI	NI	NI	NI	NI	(1)	(0)	(2)	1	2		NI	D	2
		681				RTECS No				CAS No:							
Tallow		1288	0	NI	0	R	0	NI	0	0	(0)	(0)	(0)		NI	Fp	2
		682				RTECS No				CAS No:							61789-21-6
Tallow fatty acid		1289	0	NI	0	R	0	NI	0	(0)	(0)	(0)	(0)		NI	Fp	2
		684				RTECS No				CAS No:							6170-37-2
Tetrachloroethane		53	2	2	2	NR	3	0	2	0	2	2	2	MN	NI	SD	3
		687				RTECS No	KI8575000			CAS No:							79-34-5
Tetraethylene glycol		1301	0	NI	0	NR	0	NI	0	0	0	1	1		NI	D	1
		688				RTECS No	XC2100000			CAS No:							112-60-7
Tetraethylene pentamine		1302	0	NI	0	NR	3	NI	0	2	(3)	3	3	S	NI	D	3
		689				RTECS No	KH8585000			CAS No:							112-57-2
Tetraethyl silicate monomer/oligomer (20% in ethanol)		2198	0	0	0	R	0	0	0	0	0	1	2		NI	DE	2
		2475				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	0	NI	0	R	0	NI	0	(0)	0	1	2	NI	DE	2	
		690		RTECS No	LU5950000			CAS No:						109-99-9			
Tetrahydronaphthalene		1305	3	3	3	NR	3	NI	0	0	(2)	2	0	NI	F	2	
		691		RTECS No	QK3850000			CAS No:						119-64-2			
Tetramethylbenzene (all isomers)		1307	4	NI	4	NI	4	NI	0	(0)	(1)	1	(1)	NI	F	1	
		692		RTECS No	DC0465000			CAS No:						488-23-3			
Thixatrol Plus		2210	5	NI	5	R	3	NI	0	0	0	1	1	NI	S	1	
		2699		RTECS No				CAS No:									
Titanium dioxide slurry		2080	Inor	1	1	Inorg	1	NI	0	0	0	1	1	NI	NI	1	
		2259		RTECS No				CAS No:						1317-80-2			
Toluene		330	2	2	2	R	3	0	0	0	0	2	2	ANR	NT	E	3
		693		RTECS No	XS5250000			CAS No:						108-88-3			
Toluenediamine		1317	0	2	2	NR	3	0	2	2	4	1	2	CMS	NI	Fp	3
		695		RTECS No	XS9625000			CAS No:						95-80-7			
Toluene diisocyanate		1315	(3)	1	1	NR	2	NI	0	(0)	4	3	3	SCL	NI	S	3
		694		RTECS No	CZ6300000			CAS No:						584-84-9			
o-Toluidine		1316	1	1	1	R	4	2	1	0	(2)	2	2	CM	NI	FD	3
		537		RTECS No				CAS No:									
Tolyl triazole		2292	1	NI	1	NR	2	0	1	0	(2)	(1)	2	NI	S	2	
		696		RTECS No				CAS No:						29385-43-1			
Tributyl phosphate		1319	4	2	2	R	3	0	1	0	2	2	2	S	NI	F	3
		697		RTECS No	TC7700000			CAS No:						126-73-8			
1,2,3-Trichlorobenzene (molten)		2191	4	4	4	NR	4	2	1	0	(2)	2	2	NI	S	2	
		2288		RTECS No				CAS No:						87-61-6			
1,2,4-Trichlorobenzene		1323	4	5	5	NR	4	1	1	0	(2)	2	2	M	NI	S	3
		7		RTECS No	DC2100000			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	0	NI	0	R	0	0	0	0	(1)	1	1	NI	D	1	
		708		RTECS No	YE4550000			CAS No:						112-27-6			
Triethylenetetramine		1346	0	NI	0	NR	3	NI	0	2	(3)	3	3	S	NI	D	3
		709		RTECS No	YE6650000			CAS No:						112-24-3			
Triethyl phosphate		1348	0	0	0	NR	1	0	1	0	0	(2)	(2)	NI	D	2	
		705		RTECS No	TC7900000			CAS No:						78-40-0			
Triethylphosphite		1349	0	NI	0	R	1	NI	1	0	2	1	2	S	NI	FE	2
		710		RTECS No	TH1130000			CAS No:						122-52-1			
Triisopropanolamine		1370	0	0	0	NR	1	0	1	0	0	(2)	3	NI	FD	3	
		711		RTECS No	UB8750000			CAS No:						122-20-3			
Triisopropylated phenyl phosphates		1375	5	5	5	R	4	NI	0	0	0	0	0	NI	S	0	
		712		RTECS No				CAS No:						68937-41-7			
Trimethylacetic acid		1350	1	1	1	R	2	NI	1	1	(2)	2	2	NI	Fp	2	
		714		RTECS No	TO7700000			CAS No:						75-98-9			
Trimethylamine solution (30% or less)		1353	0	NI	0	R	1	NI	1	0	2	3	3	NI	DE	3	
		715		RTECS No	PA0350000			CAS No:						75-50-3			
Trimethylbenzene (all isomers)		1354	3	3	3	NR	4	0	0	0	1	2	1	NI	FE	2	
		716		RTECS No	DC3300000			CAS No:						526-73-8			
Trimethylhexamethylenediamine (2,2,4- and 2,4,4-isomers)		1359	1	NI	1	NI	NI	NI	1	0	(3)	2	3	S	NI	D	3
		718		RTECS No	MO1451000			CAS No:						26520-58-0			
Trimethylhexamethylene diisocyanate (2,2,4- and 2,4,4-isomers)		1360	0	NI	0	NI	3	NI	0	NI	NI	NI	NI	S	NI	NI	2
		717		RTECS No	MO1760000			CAS No:						28679-16-5			
Trimethylolpropane polyethoxylate		1362	NI	NI	NI	NR	1	NI	0	0	NI	NI	NI	NI	NI	0NI	
		719		RTECS No				CAS No:						25723-16-4			
Trimethylol propane propoxylated		2274	0	NI	0	(NR)	1	0	0	0	(1)	0	1	NI	SD	1	
		2870		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	4	NI	4	NI	0	NI	0	0	(1)	1	0	NI	F	1	
		26		RTECS No				CAS No:						6846-50-0			
2,2,4-Trimethyl-1,3-pentanediol-1-isobutyrate		1364	3	NI	3	NI	2	NI	0	0	(1)	1	1	NI	Fp	2	
		27		RTECS No	UF6000000			CAS No:						25265-77-4			
Trimethyl phosphite		1365	0	NI	0	R	NI	NI	NI	NI	NI	NI	NI	NI	S	NI	
		713		RTECS No	TH1400000			CAS No:						121-45-9			
1,3,5-Trioxane		1844	0	NI	0	NI	0	NI	0	0	0	0	1	R	NI	SD	3
		10		RTECS No	YK0350000			CAS No:						110-88-3			
Tripropylene glycol		1372	0	0	0	NR	0	NI	0	0	(0)	0	0	NI	D	0	
		720		RTECS No	YK6825000			CAS No:						24800-44-0			
Trixyl phosphate		1377	5	4	4	NR	4	1	(0)	(1)	(2)	(1)	(1)	NI	S	2	
		721		RTECS No	ZE8320000			CAS No:						25155-23-1			
Tung oil		1378	0	NI	0	R	(2)	NI	(0)	(0)	(1)	(0)	(1)	NI	Fp	2	
		2784		RTECS No				CAS No:						8001-20-5			
Turpentine		1379	4	NI	4	NI	4	NI	0	(0)	1	(2)	2	AS	(T)	D	2
		722		RTECS No	YO8400000			CAS No:						8006-64-2			
Undecanoic acid		1381	4	NI	4	(R)	3	NI	(0)	(0)	(2)	1	(2)	NI	Fp	2	
		723		RTECS No	YQ2275000			CAS No:						112-37-8			
1-Undecene		1383	5	NI	5	NR	4	NI	(0)	(0)	(1)	(1)	(1)	NI	F	1	
		24		RTECS No				CAS No:						821-95-4			
Undecyl alcohol		1382	4	NI	4	R	4	NI	0	0	(2)	2	(1)	NI	Fp	2	
		724		RTECS No	YQ3155000			CAS No:						112-42-5			
Urea		1384	0	0	0	R	1	NI	0	0	(1)	1	(1)	NI	D	1	
		2627		RTECS No	YR6250000			CAS No:									
Urea/Ammonium mono- and di-hydrogen phosphate/Potassium chloride solution		1386	0	0	0	R	3	2	NI	NI	NI	NI	NI	NI	NI	NI	
		727		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	Inor	NI	Inorg	R	1	NI	0	0	(2)	1	2	NI	D	2	
		728	<b>RTECS No</b>				<b>CAS No:</b>										
Urea/Ammonium nitrate solution (containing less than 1% free ammonia)		1387	Inor	NI	Inorg	R	3	2	0	0	(2)	1	2	NI	D	2	
		729	<b>RTECS No</b>				<b>CAS No:</b>										
Urea/Ammonium phosphate solution		2179	0	0	0	R	3	2	(0)	(0)	(2)	(2)	(2)	NI	D	2	
		730	<b>RTECS No</b>				<b>CAS No:</b>										
Urea formaldehyde resin solution		1388	NI	NI	NI	NI	1	NI	1	1	NI	NI	NI	S	NI	NI	2
		725	<b>RTECS No</b>				<b>CAS No:</b>										
Urea solution		1384	0	0	0	R	1	NI	0	0	(1)	1	(1)	NI	D	1	
		726	<b>RTECS No</b> YR6250000				<b>CAS No:</b>										
Valeraldehyde (all isomers)		1390	1	NI	1	R	3	NI	0	0	0	2	2	NI	D	2	
		731	<b>RTECS No</b> ES3450000				<b>CAS No:</b>										
Vegetable acid oils (n.o.s.)		2371	0	NI	0	R	0	NI	(0)	(0)	(1)	(1)	(1)	NI	Fp	2	
		3138	<b>RTECS No</b>				<b>CAS No:</b>										
Vegetable oils fatty acid distillates (n.o..s)		2369	0	NI	0	R	0	NI	(0)	(0)	(0)	(0)	(0)	NI	Fp	2	
		3137	<b>RTECS No</b>				<b>CAS No:</b>										
Vegetable protein solution (hydrolysed)		1398	0	NI	0	R	0	NI	(0)	(0)	(0)	(0)	(0)	NI	D	0	
		734	<b>RTECS No</b>				<b>CAS No:</b>										
Vinyl acetate		1400	0	NI	0	R	2	NI	1	0	2	1	1	C	NI	ED	3
		735	<b>RTECS No</b> AK0875000				<b>CAS No:</b>										
Vinyl ethyl ether		1405	1	NI	1	NR	1	NI	0	0	0	1	1	NI	E	2	
		736	<b>RTECS No</b> KO0710000				<b>CAS No:</b>										
Vinylidene chloride		1406	2	1	1	NR	2	NI	2	0	(2)	2	2	M	NI	SD	3
		738	<b>RTECS No</b> KV9275000				<b>CAS No:</b>										
Vinyl neodecanoate		1404	5	NI	5	NR	3	NI	0	0	(3)	3	3	NI	F	3	
		737	<b>RTECS No</b>				<b>CAS No:</b>										

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

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## 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**

<b>IBC Code Name</b>	<b>EHS</b>	<b>A1</b>	<b>A2</b>	<b>B1</b>	<b>B2</b>	<b>C1</b>	<b>C2</b>	<b>C3</b>	<b>D3</b>	<b>E2</b>
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

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**ANNEX 6****INCONSISTENCIES BETWEEN HAZARD PROFILES AND  
IBC CODE TRANSPORT REQUIREMENTS**

<b>EHS</b>	<b>PRODUCT NAME</b>	<b>COMMENT</b>
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

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## **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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