

REPORT OF THE FORTY-SIXTH SESSION

1 INTRODUCTION

1.1 The forty-sixth session of the GESAMP/EHS Working Group on the Evaluation of the Hazards of Harmful Substances Carried by Ships was held at IMO Headquarters, London, from 20 to 24 April 2009 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.

Matters arising from IMO

1.2 The Group noted that the following meetings had taken place since the last session of the GESAMP/EHS Working Group:

- .1 the fourteenth intersessional meeting of the Working Group on the Evaluation of Safety and Pollution Hazards of Chemicals (ESPH 14) met from 27 to 31 October 2008;
- .2 the Evaluation of Safety and Pollution Hazards (ESPH) Working Group also met from 3 to 4 March 2009 during BLG 13;
- .3 the Sub-Committee on Bulk Liquids and Gas held its thirteenth session from 2 to 6 March 2009; and
- .4 the Marine Environment Protection Committee had met for its fifty-eighth session from 6 to 10 October 2008.

Matters arising from these meetings which are of relevance to the work of GESAMP/EHS are summarized in annex 3.

1.3 Two items arising from this summary were debated at this point by the Group: the ratings used in the Composite List and the evaluation of petroleum fuels.

1.4 For the former issue, it had been noted that blank entries could sometimes be found for D3 (long-term health effects) and E1 (tainting) properties in the GESAMP/EHS Composite List and it had been questioned by ESPH if this might be interpreted to indicate that data are missing. It had been explained that it had been past practice to leave D3 empty if none of the specified effects under this parameter were judged to be relevant by GESAMP/EHS and that this was also then the default position used in the database which generates the Composite List. A blank for D3 (rather than “-”) does not mean therefore that long-term health effects have not been considered or that the profile is consequently incomplete.

1.5 To re-emphasize this point, the Group recalled that Column D3 is intended to represent specific long-term health effects relevant for humans. Where there are available reliable data, from human experience or from appropriate tests in animals, of a specific hazard for human health, this is indicated by a notation in column D3 as described in GESAMP Reports & Studies No.64 (pages 51-56). Alternatively, when there are no relevant data available for a specific health hazard or where reliable data are available indicating no specific health hazard of relevance to humans, column D3 contains a blank entry. Column D3 therefore contains only entries of notations to indicate positive evidence of specific health hazards relevant for humans.

1.6 With respect to parameter E1, it is noted in GESAMP Reports and Studies No.64 that over recent years, an assessment of tainting properties has been withdrawn as a regulatory criterion for classifying chemical substances for transport purposes. In the Composite List, all of the old ratings cited are endorsed by supporting evidence and on this basis, it was decided to retain column E1 data in the hazard profile for information purposes. In taking this action, it was recognized that, in the future, ratings for new substances would no longer be expected to be provided and that, consequently, there would be a growing number of entries in the Composite List where E1 would appear as a blank since data are not available/required.

1.7 On the issue of the evaluation of petroleum fuels, it was noted that BLG/ESPH were requesting the assignment of generic hazard profiles for petrol and diesel in order that bio-fuel blends could be reviewed under MEPC.1/Circ.512 in line with the procedures for mixture products. In this context, these products should be assessed as List 5 entries for the MEPC.2/Circular (Substances not shipped in pure form but as components in mixtures) whereby only ratings for columns A1, A2, B1, B2, D3 and E2 of the GESAMP Hazard Profile need to be assigned.

1.8 The Group considered the approach to adopt in order to be able to progress this issue and recalled that a successful outcome had been achieved for pyrolysis gasoline and coal tar creosote by using a weighted average for each column based on compositional data for a wide range of representative samples. It was concluded that a similar approach should be pursued but it was noted that compositional data should be assembled on as broad a basis as possible in order to give a global representation.

1.9 To effect this, contacts would be made by EHS members with regional petrochemical associations in order to try to assimilate the necessary compositional and safety/environmental information on gasoline (petrol) and diesel. It was noted by the Group that further support or guidance might still be needed from ESPH.

Activities of GESAMP

1.10 The Group received a report from the GESAMP Officer, Mr. Martin Soderberg on a number of recent activities and initiatives which had been undertaken by GESAMP. The key points addressed are summarized in annex 4.

2 EVALUATION OF NEW PRODUCTS

2.1 The Group considered the following new substances which had been submitted for evaluation by industry:

- .1 Poly(oxyalkylene)alkenyl ether (MW>1000);
- .2 Stabilized Yeast Extract Solution;
- .3 2-Methylglutaronitrile and 2-Ethylsuccinonitrile;
- .4 Octamethylcyclotetrasiloxane;
- .5 Crude alpha-Methylbenzyl alcohol;
- .6 Tetrapotassium pyrophosphate;
- .7 Shale oil;
- .8 Jatropa oil; and
- .9 Wood lignin with sodium acetate/oxalate

2.2 The resultant hazard profiles for these products are set out in annex 5.

2.3 In considering the various products, the Group made the following observations and comments:

- .1 **Poly(oxyalkylene)alkenyl ether (MW>1000)** – the Group decided that the chemical name submitted was too generic and accordingly, it was proposed to modify this to “Poly(ethylene glycol) methylbutenyl ether (MW>1000)”. It was noted that for column B2, it had been proposed by the manufacturer that chronic aquatic toxicity might be assessed by a consideration of the 28 day biodegradation properties in conjunction with the acute NOEC values for Fish, Crustaceans and Algae. For the purposes of the GESAMP profile, NI (no information) was recorded for B2 but it was recalled that with respect to the categorization and classification of products, an approach similar to the one proposed was utilized in any case for the assessment of B2 ratings for regulatory purposes by the ESPH Working Group (see annex 7 of BLG 12/3 for further details);
- .2 **Stabilized Yeast Extract Solution** – the Group expressed concern that the chemical name submitted needed to be more specific and accordingly, it was proposed to modify this to “Yeast Extract Solution with Propylene Glycol (25% or less)”;
- .3 **2-Methylglutaronitrile and 2-Ethylsuccinonitrile** – submissions had been received for both crude and refined variants of this product mixture. After assessing the supporting data in each case, the Group concluded that just a single hazard profile was needed to cover both entities, but that the name for this should be “2-Methylglutaronitrile with 2-Ethylsuccinonitrile (12% or less)”;
- .4 **Octamethylcyclotetrasiloxane** – the Group noted favourably the very comprehensive data set provided to support this material which had facilitated the clear assignment of the hazard profile;
- .5 **Crude alpha-Methylbenzyl alcohol** – the Group proposed a revised name for the Composite List of “alpha-Methylbenzyl alcohol with acetophenone (15% or less)”. In this submission, it was noted that with respect to acute aquatic toxicity, QSAR data only had been provided. It had been highlighted that this substance rapidly biodegrades to acetophenone (for which acute test results had been supplied) but the Group did not accept that this rationale would necessarily mean that acute toxicity

for the parent compound would be equivalent or no worse than the breakdown material. Nevertheless, by referring to additional literature information, the Group concluded that in this instance a rating for acute aquatic toxicity could be reliably assigned;

- .6 **Tetrapotassium pyrophosphate** – the manufacturer noted that very similar substances to this product are treated under the OSPAR Convention as PLONOR materials (Pose Little or No Risk to the Environment). As no underlying reports were available to the Group, this approach was not accepted. The substance was therefore rated on the basis of data identified for similar substances;
- .7 **Shale oil** – this product was recognized to be a very complex mix of hydrocarbons and heterocyclic compounds but it was well supported by a comprehensive set of studies on the material as a whole which facilitated the assignment of the hazard profile. Concern was expressed at the log Pow value submitted, however, since this was judged to be at the low end of the range which would be expected for the type of constituents present in this product mixture and a conservative rating was therefore assigned. In terms of sensitization properties, it was noted that the product had shown clear skin effects but that no supporting evidence had been provided to support the claim that this was not a respiratory sensitizer;
- .8 **Jatropha oil** – the Group observed that the submission for this product was based predominantly on analogies made with data available for castor oil. Due to the special characteristics of castor oil (carboxylic acids content ca 90% 12-hydroxy-cis-octadec-9-enoic acid), this, however, was not accepted as a good basis on which to conduct an evaluation. Based on data defining the composition of Jatropha oil, analogies were made to other vegetable oils previously reviewed by GESAMP/EHS (particularly Groundnut oil) but note was taken also of minor components present in the product (such as phorbol diesters); and
- .9 **Wood lignin with sodium acetate/oxalate** – this product was initially submitted as “Evaporate concentrate for wood pulping industry containing sodium components” but the Group decided that a more descriptive name, as indicated above, was required for the composite list entry.

Cleaning additive components

2.4 The Group noted that for some of the products evaluated, these substances may be used as components in cleaning additive formulations. Although full hazard profiles had been requested, the Group recalled that in accordance with MEPC.1/Circ.590 (Revised tank cleaning additives guidance note and reporting form), a shortened hazard profile only is formally required for cleaning additive components. This allows a Pollution Category to be determined but only requires ratings to be established for columns **A1 (bioaccumulation)**, **A2 (biodegradation)**, **B1 (acute aquatic toxicity)** and **D3 (long-term health effects)**.

2.5 It was stressed, however, that even if only a partial GESAMP profile is required, it is nevertheless imperative that full supporting data are provided for the properties to be reviewed. In this context, the Group reiterated their advice with respect to the submission of data for components of cleaning additives specifying the key elements, as listed below, which need to be addressed when completing the GESAMP form:

- | | | |
|--------------|---|---|
| Sections 1-4 | - | all relevant information; |
| Section 5 | - | molecular weight and water solubility; |
| Section 7 | - | sensitisation and any long term health effects; and |
| Section 8 | - | acute toxicity data; |
| | | bioaccumulation data; and |
| | | biodegradation data. |

Further guidance on presenting these data are given in the GESAMP Reports and Studies No.64 publication (The Revised GESAMP Hazard Evaluation Procedure for Chemical Substances carried by Ships) and this report may be found at the website <http://gesamp.imo.org/publicat.htm>. To support all data submissions, the Group further reiterated that summaries with full reference details or complete study reports should always be provided.

2.6 In response to the suggestion proposed by ESPH to identify cleaning additive components in the composite list with an appropriate footnote (so as to highlight that such partial profiles cannot be used for mixture calculations), the Group agreed that in future, this could be incorporated into the database in order to clearly identify such substances (currently, no entries require this).

3 CORRESPONDENCE WITH THE INDUSTRY AND CONSIDERATION OF QUERIES RELATED TO EVALUATIONS

Industry Correspondence

3.1 The Group noted that additional information on the following two products had been received with a request that this be taken into account for the evaluation of these substances. The results of this exercise are set out at annex 6.

Metam sodium solution

3.2 A wide range of new results/supporting data relating to acute aquatic toxicity studies for fish, crustaceans and algae had been submitted for consideration. In assessing this information, the Group concluded that:

- .1 the supporting studies provided which were based on the analogous potassium compound were valid for use in the re-evaluation of metam sodium solution;
- .2 the materials tested varied across the available studies; sometimes results related to formulated solutions whereas the composite list entry had been based on active substance concentration; and
- .3 after taking account of the new data and all of the factors presented, the rating for acute aquatic toxicity (B1) should be amended to a value of 4.

Poly (tetramethylene ether) glycol (mw 600-3000)

3.3 The Group noted that two new reports describing biodegradation properties and acute dermal toxicity had been received for consideration. After reviewing the study reports, the Group concluded that a rating of NR for column A2 and a rating of 0 for column C2 should be assigned. With respect to Human Health effects, after re-examining the data files, further amendments to the hazard profile were made as follows: C3=(0), D1=0 and D2=(0). Additionally, for column E3 a revised value of 0 was assigned as consequence of the other changes introduced.

Other products

3.4 In relation to requests arising from EHS 45 for data checks to be undertaken for Heptenes (all isomers), Alkyltoluenesulphonic acid calcium salt and Polyolefin amide alkeneamine polyol, it was noted that no feedback had been received from the manufacturers for these materials. It was agreed, however, that further contact with the producers concerned should be made in order to attempt to resolve these issues. The Group noted that in cases where doubts had later arisen as to the relevance of analogous supporting data which had been used to develop a hazard profile, if the validity of the data could not be confirmed then the profile would be withdrawn from the Composite List.

Miscellaneous amendments

3.5 During a review undertaken by the Secretariat of a section of the GESAMP/EHS files, some anomalies for specific properties in hazard profiles (comparing to information noted in the files) had been observed for a small number of substances. These observations were presented to the Group for their consideration and consequently, some corrections were made to the hazard profiles of the materials shown in annex 7. Changes implemented are indicated against each of the substances listed and these amendments have been incorporated into the updated GESAMP/EHS Composite List as presented in annex 6.

3.6 Additionally, in response to the request made by the ESPH Working Group in relation to sodium bicarbonate solution, the Group agreed to add the descriptor “less than 10%” to this entry in the GESAMP/EHS Composite List.

4 BALLAST WATER TREATMENT BY-PRODUCTS

4.1 At the request of IMO on behalf of the GESAMP Ballast Water Working Group (BWWG), key environmental, human health and physical-chemical properties were reviewed for eighteen substances which are of interest to the Group in the context of their evaluation of ballast water treatment systems. The materials concerned are listed in annex 8.

4.2 Information was requested on a range of phys-chem characteristics and on the properties listed below:

Acute aquatic toxicity	Acute mammalian toxicity
Chronic aquatic toxicity	Corrosion/irritation
Sediment toxicity	Sensitization
Endocrine disruption	Repeated-Dose toxicity
Bioaccumulation	Development and Reproductive toxicity
Modes of degradation	Carcinogenicity/Mutagenicity

4.3 This information was needed in order to assist the BWWG with their risk assessment work on common by-products generated by various oxidizing treatment systems and technical profiles were generated accordingly. In some instances, GESAMP/EHS hazard profiles had previously been assigned and, where available, these were then used as a basis from which to develop the profiles and extended data sets required.

4.4 Full data profiles were developed for the first five products on the list and this information has now been provided to BWWG for consideration in their evaluation work. Further data were also assembled for other products listed for some of the properties required but more work remains to be done in order to complete the exercise. It was noted that in a number of cases, additional data to that initially submitted to BWWG had been identified and that this had been utilized in the review process. Due to the need to establish and record data profiles beyond the standard EHS requirements, it was agreed that the materials evaluated would not be incorporated into the GESAMP/EHS Composite List.

4.5 In reviewing this task, the Group agreed that a meeting with BWWG experts could be beneficial in order to explain fully the approaches adopted, especially in cases where there was a need to reconcile scientific opinions on a chemical substance.

4.6 The Group agreed to continue with this work item intersessionally.

5 CONSOLIDATION OF DATA

Olefin substances and mixtures

5.1 Following on from the request made by BLG/ESPH to review olefin substances and mixtures (see agenda item 1 and annex 3), a comprehensive review of these products was undertaken by the Group. This addressed both nomenclature issues and profile consistency within the product family and resulted in a number of amendments being introduced.

5.2 A summary of the olefin substances and mixtures involved in the review together with their revised ratings are shown in annex 9 (with changes highlighted). These amendments have been incorporated into the updated GESAMP/EHS Composite List as presented in annex 6.

Acrylate and methacrylate esters

5.3 The Group decided that this review item, carried over from previous years was no longer a priority issue in view of updates effected at EHS 44 and that accordingly, it will now not be progressed further and will be withdrawn therefore from the meeting agenda.

6 COMMUNICATION AND PUBLICATION

6.1 The Group recalled that at its previous meeting it had discussed a proposal to prepare a paper for publication on its recent work with the revised GESAMP hazard evaluation procedure. After further discussion on this topic, it was agreed to focus this activity on promoting the methodology developed for the estimation of inhalation toxicity in the context of bulk maritime transport. An initial text had been developed which included details of a comprehensive validation study undertaken in support of this approach and this was reviewed by the Group.

6.2 It was agreed that further work on the draft would be undertaken intersessionally and that this would include setting into context the need and the resultant benefits associated with this work. Consideration of a publication strategy would follow in due course but it was proposed that initially, the review paper could be presented and made available on the GESAMP website.

7 ANY OTHER BUSINESS

Professor Meiko Wakabayashi and Dr. Bryan Ballantyne

7.1 The group noted with sadness the passing away in the intersessional period of two of its former members: Professor Meiko Wakabayashi and Dr. Bryan Ballantyne.

7.2 Professor Wakabayashi served on the working group from 1995 to 2007. She provided continuous access to environmental data from Japan which would otherwise have been unavailable to the group. She was also instrumental in bringing the ecotoxicology sub-group to Japan to hold their meeting in Tokyo on two occasions, so enabling contacts to be made with the Japan Chemicals Industry Association and the Japan Ministries of Environment and of Transport. This considerably speeded up the work of the group on the review of the environmental sections of the GESAMP hazard profiles for the Revision of Annex II of MARPOL.

7.3 Dr. Ballantyne served on the working group from 1977 to 2000 and contributed continuously to the group's knowledge on the toxicology and human health effects of chemicals for maritime transport as bulk liquids and as packaged goods. He was the senior editor of leading toxicology reference works, in particular General and Applied Toxicology. His knowledge of the potential of chemicals to cause skin, eye and respiratory tract irritation was unique. He was involved in the development of the original GESAMP Hazard Profile (1982) as well as the revised and expanded version in 1998.

Membership issues

7.4 The Group welcomed Mr. Martin Soderberg, GESAMP officer to the meeting (attending part-time) and expressed appreciation for his update on GESAMP activities.

7.5 The Group noted that as yet, it had not been possible to identify a suitable successor for Professor Syversen. It was agreed that efforts should be intensified to recruit a senior toxicologist over the coming months in order to sustain the expertise levels in this area. In a similar context, it was also agreed that additional ecotoxicity expertise/resource should be found in order to strengthen the panel of members available to give support in this field.

7.6 In the cases noted above, the Group agreed that opportunities to involve scientific experts from developing countries in the activities of GESAMP/EHS should be explored.

Funding arrangements

7.7 The Group recalled that charges had now been introduced for the evaluation of new substances in line with the earlier decision taken by MEPC. The mechanism employed treats the evaluation of products to be carried in bulk, products used as a component in a bulk mixture and components used in cleaning additives in an identical manner and is based on a fixed fee/user pays principle. As part of these arrangements, it had been agreed that the fixed fee must be paid each time an evaluation is carried out on a product since this provides a clear incentive to provide the complete range of data necessary for the Working Group to carry out an evaluation in one session. It was noted, however, that the application of further fees was not intended to apply in cases where some follow-up action was needed on a specific issue in order just to clarify study methodology details or test results.

7.8 In the current session, nine product submissions had been processed at the fixed fee rate of US\$6,500. Three further products had also initially been put forward for review but these substances were subsequently withdrawn prior to the EHS 46 meeting.

7.9 The Group were advised that, in accordance with MEPC/BLG guidance, the income now available will be used to support and maintain expertise at EHS Working Group meetings in line with the objectives as outlined above.

8 FUTURE WORK PROGRAMME AND DATE OF THE NEXT SESSION

8.1 The Group agreed to a draft work programme for its next session which is set out in annex 10.

8.2 The Group agreed that the next regular meeting would be tentatively held from 19 to 23 April 2010.

8.3 Submissions for this session should reach the *Technical Secretary of the GESAMP/EHS Working Group not later than Friday, 12 March 2010.

9 CONSIDERATION AND ADOPTION OF THE REPORT

9.1 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 Hazard Profiles, the Chairman closed the session on Friday, 24 April 2009 at 12.10 hrs.

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ANNEX 2**AGENDA FOR THE FORTY-SIXTH 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
 - Cleaning Additive components
- 3 Correspondence with industry and consideration of queries related to evaluations
 - Industry correspondence
 - Miscellaneous amendments
- 4 Ballast Water Treatment by-products
- 5 Consolidation of data:
 - Olefin substances and mixtures
 - Acrylate and methacrylate esters
- 6 Communication and publication
 - Acute inhalation toxicity review
- 7 Any other business
 - Membership issues
 - Review of funding arrangements
- 8 Future work programme and date of the following session
- 9 Consideration and adoption of the report

ANNEX 3

MATTERS ARISING FROM IMO

1.1 At the fourteenth intersessional meeting of the Working Group on the Evaluation of Safety and Pollution Hazards of Chemicals, the ESPH Group had:

- .1 elected Mr. David MacRae (United Kingdom) as the new Chairman of the Working Group in succession to Mrs. M. C. Tiemens-Idzinga (Netherlands) who has now relinquished this role after many years of dedicated service;
- .2 decided on the coding for Strategic direction, High-level Action Plan and Planned outputs to be used for product evaluation submissions (5.2/5.2.3/5.2.3.1). In this context, GESAMP/EHS activities are reflected under items 1.3/1.3.3/1.3.3.1 as follows:
 - 1.3 Actively seek to reap synergies and avoid duplication of efforts made by other UN agencies in shipping matters;
 - 1.3.3 Monitor developments within GESAMP and make full use of the knowledge available and gained; and
 - 1.3.3.1 Hazard profiles and evaluation of newly submitted substances to be incorporated into the IBC Code;
- .3 noted that blank entries under D3 and E1 in the GESAMP/EHS composite list do not indicate missing data since the default in the database is to leave the parameter blank unless an appropriate code letter has been entered. Notwithstanding this, as it was recognized that the use of blank entries might still be seen by some as confusing, it was agreed that this concern should be relayed to GESAMP/EHS for consideration;
- .4 agreed that GESAMP/EHS should be requested to review olefin substances and mixtures as it appeared that there may be some inconsistencies within the product family with respect to profiles and names used to describe olefin mixtures;
- .5 noted the view that when a toxic solid such as sodium bromide with a low vapour pressure is suspended in water, loaded and discharged under closed conditions and carried at ambient temperature then the requirement for controlled venting during carriage may not need to be applied but had agreed that the issue requires further consideration;
- .6 agreed to request GESAMP/EHS to consider adding the descriptor “less than 10%” to the entry for Sodium bicarbonate solution in the composite list;
- .7 noted that GESAMP/EHS had carried out a comprehensive review of all phthalate products in the composite list and as a result some hazard profiles had been amended which might impact on carriage requirements under the IBC Code. In consequence, the Group had agreed that when it is observed that a GESAMP hazard profile is not in line with the IBC Code entry, a submission needs to be made to BLG/ESPH to update the carriage requirements;

- .8 noted the advice from GESAMP/EHS with regards to the key data elements required when assessing cleaning additive components;
 - .9 agreed that GESAMP/EHS should be requested to consider if an appropriate footnote could be included for cleaning additive component entries in the GESAMP/EHS composite list to indicate that these materials cannot be used in mixture calculations, as specified in MEPC.1/Circ.512;
 - .10 agreed a procedure for handling confidential data in relation to product evaluations and had noted growing concerns from industry with respect to maintaining confidentiality; and
 - .11 decided that mixtures containing more than 1% but less than 85% petroleum oil, should be assessed in accordance with MEPC.1/Circ.512 following the procedures for mixtures with unassessed components that show a safety hazard.
- 1.2 The ESPH Working Group also met during BLG 13 and during this session, the ESPH Group had:
- .1 agreed that if anomalies are raised by Administrations with regards to assigned carriage requirements, and a GESAMP Hazard Profile, then a document submission to ESPH should be made in line with normal procedures;
 - .2 agreed further that whenever, changes are made by GESAMP/EHS (as a consequence of new data becoming available or product families being reassessed) any impact on carriage requirements should be addressed by the ESPH Group at the time of reviewing EHS activities;
 - .3 proposed to extend interim guidelines to permit the continued carriage of bio-fuel blends on Annex I ships (further 24 months from the date of expiry agreed by BLG);
 - .4 proposed that GESAMP/EHS should be requested to generate appropriate hazard profiles for petroleum fuels leading to List 5 entries in the MEPC.2/Circular (Substances not shipped in pure form but as components in mixtures) in order to address the issue of unassessed components in bio-fuel blends; and
 - .5 noted the satisfactory progress made in the revision of chapter 19 of the IBC Code and had requested that any comments or input from interested parties should be provided to Mr. R. Luit of the Netherlands for consolidation into the review (e-mail: Richard.Luit@rivm.nl).
- 1.3 In BLG 13, the Sub-Committee approved the reports of the ESPH Working Group and:
- .1 endorsed the proposals made by the Group and concurred with actions taken;
 - .2 proposed to invite MSC 86 and MEPC 59 to approve the holding of an intersessional meeting of the ESPH Working Group in 2010; and

- .3 developed a draft MSC resolution for consideration and adoption at MSC 86 on Recommendations for material safety data sheets (MSDS) for MARPOL Annex I oil cargo and oil fuel.

1.4 The Marine Environment Protection Committee (MEPC) had held its fifty-eighth session and during this meeting, MEPC had:

- .1 approved the report of BLG 12 in general;
- .2 approved the holding of an intersession meeting of the ESPH Working Group in 2009, noting MSC 84's concurrent decision; and
- .3 endorsed the view of the BLG Sub-Committee that the Chairman of the GESAMP/EHS Working Group should be present, if needed, at ESPH Working Group meetings during the debate on the report and the discussion on the evaluation of new products for inclusion in the IBC Code. Funding support, as required, should be made available from the revenue arising from the charging mechanism put into place for EHS evaluations.

ANNEX 4
REVIEW OF GESAMP ACTIVITIES
(M. Soderberg)

1. Since the last meeting of WG1, a new GESAMP Officer has been appointed in succession to Mr. Fredrik Haag. The new officer is Mr. Martin Soderberg.
2. Mr. Soderberg introduced himself to the group and updated the group about GESAMP activities during the past year, the major items being:
 - .1 The Chairman of WG1, Dr. Tim Bowmer, was elected Chairman of GESAMP at GESAMP 35, the annual session of GESAMP which, in 2008, was held in Accra, Ghana;
 - .2 there are currently seven GESAMP working groups active together with one Task Team. The group was informed as to the work activities and progress made for each group;
 - .3 GESAMP is participating in the Assessment of Assessments (AoA), the start-up phase of the UN Regular Process. GESAMP has observer status and has set up a Task Team to address Pollution in the Open Ocean, as part of the regional summaries for the Assessment of Assessments;
 - .4 the GESAMP Office and the Sponsoring Organizations are working on finalizing a new GESAMP Memorandum of Understanding, the aim of which is to make GESAMP more transparent, and to allow for easier co-operation between the Sponsoring Organizations; and
 - .5 GESAMP has a new website which features a Pool of Experts and a Virtual Office. The website will facilitate communication with the scientific community as well as the general public and the Pool of Experts will help working groups and Sponsoring Organizations to recruit scientific expertise. The Virtual Office will facilitate internal communications, e.g. between members of working groups and the members of WG1 were given a demonstration of how the Virtual Office will operate.

ANNEX 5 - NEW SUBSTANCES SUBMITTED FOR EVALUATION (GESAMP Hazard Profiles)

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EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Jatropha oil	2402	0	NI	(0)	(R)	(2)	NI	(0)	(0)	(0)	(0)	(0)			Fp	2
Jatropha oil	3637	RTECS No			CAS No											
alpha-Methylbenzyl alcohol with acetophenone (15% or less)	2399	1	NI	1	(R)	(1)	NI	(1)	(0)	(3)	(2)	(3)	R		Fp	3
Crude alpha-Methylbenzyl alcohol	3634	RTECS No			CAS No 98-85-1											
2-Methylglutaronitrile with 2-Ethylsuccinonitrile (12% or less)	2397	0	NI	0	R	0	NI	2	2	3	0	1			FD	2
2-Methylglutaronitrile and 2-Ethylsuccinonitrile	3632	RTECS No			CAS No 4553-62-2											
Octamethylcyclotetrasiloxane	2398	5	5	5	NR	0	3	0	0	0	0	0			F	1
Octamethylcyclotetrasiloxane	3633	RTECS No			CAS No											
Poly(ethylene glycol) methylbutenyl ether (MW > 1000)	2395	NI	0	0	R	1	NI	0	0	(0)	0	0			D	0
Poly(oxyalkylene)alkenyl ether (MW > 1,000)	3501	RTECS No			CAS No											
Shale oil	2401	(5)	NI	(5)	NR	3	0	0	0	(2)	2	2	CS		Fp	3
Shale oil	3636	RTECS No			CAS No											
Tetrapotassium pyrophosphate	2400	Inorg	0	0	Inorg	1	NI	0	NI	NI	NI	NI			D	NI
Tetrapotassium pyrophosphate	3635	RTECS No			CAS No 7320-34-5											
Wood lignin with sodium acetate/oxalate	2403	NI	NI	(0)	NR	(0)	NI	0	(0)	(1)	(1)	(1)			D	1
Wood lignin with sodium acetate/oxalate	3638	RTECS No			CAS No											
Yeast Extract Solution with Propylene Glycol (25% or less)	2396	NI	0	0	R	0	NI	0	0	(1)	0	1			D	1
Stabilized Yeast Extract Solution	3631	RTECS No			CAS No 8013-01-2											

ANNEX 6

UPDATED COMPOSITE LIST

Note:

In the Composite List, both EHS and TRN (shipping) names as registered in the database are now shown for each product.

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EHS Name TRN 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			D	3
Acetic acid	64		RTECS No		AF1225000				CAS No		64-19-7					
Acetic anhydride	12	0	0	0	R	1	NI	1	0	2	3	3	A		D	3
Acetic anhydride	65		RTECS No		AK1925000				CAS No		108-24-7					
Acetochlor (ISO)	2047	3	2	2	NR	4	NI	1	0	(1)	0	0			S	2
Acetochlor	66		RTECS No		AB5457000				CAS No		34256-82-1					
Acetone	15	0	0	0	R	0	0	0	0	0	1	2		NT	DE	2
Acetone	67		RTECS No		AL3150000				CAS No		67-64-1					
Acetone cyanohydrin	14	0	0	0	R	4	NI	3	4	3	(3)	(3)			D	3
Acetone cyanohydrin	68		RTECS No		OD9275000				CAS No		75-86-5					
Acetonitrile	16	0	0	0	R	1	NI	1	1	2	1	2			D	2
Acetonitrile	69		RTECS No		AL7700000				CAS No		75-05-8					
Acetonitrile (Low purity grade)	2333	0	NI	0	R	3	NI	1	1	2	1	2			D	2
Acetonitrile (Low purity grade)	2876		RTECS No						CAS No							
Mixed acid oil	2306	(0)	NI	(0)	(R)	(0)	NI	0	(0)	(1)	(1)	1			Fp	2
Acid oil mixture from soyabean, corn (maize) and sunflower oil refining	3036		RTECS No						CAS No							
Acrylamide	23	0	0	0	R	2	0	2	2	(2)	1	2	CMNS		D	3
Acrylamide solution (50% or less)	70		RTECS No		AS3325000				CAS No		79-06-1					
Acrylic acid	24	0	0	0	R	4	NI	2	2	2	3C	3			D	3
Acrylic acid	71		RTECS No		AS4375000				CAS No		79-10-7					
Acrylonitrile	25	0	2	2	NR	3	0	2	3	3	2	2	CSM	NT	DE	3
Acrylonitrile	72		RTECS No		AT5250000				CAS No		107-13-1					
Acrylonitrile-styrene copolymer dispersion in polyether polyol (LOA)	1432	NI	0	0	NI	1	NI	0	(0)	(0)	0	(0)			S	0
Acrylonitrile-Styrene copolymer dispersion in polyether polyol	73		RTECS No						CAS No							
Adiponitrile	26	0	0	0	R	1	NI	3	(3)	3	3	(3)			FD	3
Adiponitrile	74		RTECS No		AV2625000				CAS No		111-69-3					
Alachlor (ISO)	1488	3	3	3	NI	4	1	1	0	(2)	1	0	CS		S	3
Alachlor technical (90% or more)	75		RTECS No		AE1225000				CAS No		15972-60-8					
Alcoholic beverages	293	0	0	0	R	0	0	0	0	0	0	1			D	1
Alcoholic beverages, n.o.s.	85		RTECS No						CAS No							

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EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Alcohol(C8-C11) poly(2.5-9)ethoxylates	2094	3	3	3	R	3	NI	1	0	(2)	(2)	(2)			D	2
Alcohol (C9-C11) poly (2.5-9) ethoxylate	2209		RTECS No						CAS No							
Alcohol(C6-C17)(secondary) poly(3-6)ethoxylate	722	4	3	3	R	4	2	0	(0)	(3)	3	2			D	3
Alcohol (C6-C17) (secondary) poly(3-6)ethoxylates	81		RTECS No						CAS No							
Alcohol(C6-C17)(secondary) poly(7-12)ethoxylate	295	3	3	3	R	4	1	1	0	(3)	3	3			D	3
Alcohol (C6-C17) (secondary) poly(7-12)ethoxylates	80		RTECS No						CAS No							
Alcohol(C12-C16) poly(1-6)ethoxylates	294	5	3	3	R	4	1	0	0	(2)	2	2			FD	2
Alcohol (C12-C16) poly(1-6)ethoxylates	77		RTECS No						CAS No							
Alcohol(C12-C16) poly(20 and above)ethoxylates	1482	4	(3)	(3)	R	2	0	(0)	(0)	(2)	2	1			D	2
Alcohol (C12-C16) poly(20+)ethoxylates	78		RTECS No						CAS No							
Alcohol(C12-C16) poly(7-19)ethoxylates	1481	4	3	3	R	4	1	1	0	(3)	3	3			D	3
Alcohol (C12-C16) poly(7-19)ethoxylates	79		RTECS No						CAS No							
Alcohols, C13 and above as individuals and mixtures	2039	5	2	2	R	4	1	0	0	0	(1)	(1)			Fp	2
Alcohols (C13+)	86		RTECS No						CAS No							
Fatty alcohols, linear, (C16+)	2327	(5)	(2)	(2)	(R)	(0)	(1)	0	0	(1)	1	1			Fp	2
Alcohols, linear (C16+)	3082		RTECS No						CAS No							
Fatty alcohols, linear, (C12+)	2326	(5)	(2)	(2)	(R)	(4)	(1)	0	0	(1)	1	1			Fp	2
Alcohols (C12+), primary, linear	3081		RTECS No						CAS No							
Alcohols (C8-C11)	2279	5	2	2	(R)	(3)	(1)	(0)	(0)	(2)	(2)	(2)			Fp	2
Alcohols (C8-C11), primary, linear and essentially linear	2887		RTECS No						CAS No							
Alcohols (C12-C13), linear	2294	5	2	2	R	4	(1)	0	0	(1)	1	1			Fp	2
Alcohols (C12-C13), primary, linear and essentially linear	2950		RTECS No						CAS No							
Alcohols (C14-C18), linear	2293	5	2	2	R	0	1	0	0	(1)	1	1			Fp	2
Alcohols (C14-C18), primary, linear and essentially linear	2951		RTECS No						CAS No							
Alkanes (C6-C9)	2202	(5)	NI	(5)	(R)	(4)	NI	(0)	(0)	(1)	(2)	(2)	N		FE	2
Alkanes (C6-C9)	88		RTECS No						CAS No							
Iso- and cyclo-alkanes (C10-C11)	2203	(5)	NI	(5)	NI	(0)	(0)	(0)	(0)	(1)	(1)	(0)			F	1
Iso- and cyclo-alkanes (C10-C11)	393		RTECS No						CAS No							
Iso-and cyclo-alkanes (C12+)	2204	(5)	NI	(5)	NI	(0)	NI	0	0	(1)	NI	NI			NI	1
Iso- and cyclo-alkanes (C12+)	394		RTECS No						CAS No							

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EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Alkanes(C12 -C26), linear and branched	2392	0	NI	0	R	0	NI	0	0	(1)	1	1	A		F	3
Alkanes(C12 -C26), linear and branched	3562		RTECS No						CAS No		90622-53-0					
n-Alkanes (C10-C20)	296	(5)	NI	(5)	(R)	(0)	(0)	(0)	(0)	(1)	(1)	(0)	A		F	3
n-Alkanes (C10+)	471		RTECS No						CAS No							
Alkaryl polyether (C9-C20) (LOA)	1974	4	NI	4	NR	3	NI	0	0	(3)	2	3			S	2
Alkaryl polyethers (C9-C20)	90		RTECS No						CAS No							
[OLOA 17503]	2376	5	(3)	(3)	R	2	NI	0	0	(2)	2	0			Fp	2
Alkenoic acid ester, borated	3153		RTECS No						CAS No							
Alkenylamide, long chain, more than C10	1858	3	NI	3	(NR)	4	NI	0	(0)	(1)	0	1			Fp	2
Alkenyl (C11+) amide	838		RTECS No						CAS No							
Alkenyl succinic anhydride	298	0	0	0	NR	1	NI	0	0	(2)	2	(2)	S		FD	2
Alkenyl (C16-C20) succinic anhydride	2336		RTECS No						CAS No							
Alkyl acrylate/Vinyl pyridine copolymer in toluene	299	2	2	2	R	2	0	0	0	(2)	2	2	RNA		F/Fp	3
Alkyl acrylate-vinylpyridine copolymer in toluene	94		RTECS No						CAS No							
Alkyl amine, alkenyl acid ester, mixture	1433	NI	NI	NI	NI	1	NI	(0)	(0)	NI	NI	NI	S		Fp	3
Alkyl(C8+)amine, Alkenyl (C12+) acid ester mixture	98		RTECS No						CAS No							
Alkylaryl phosphate mixtures (more than 40% Diphenyl tolyl phosphate, less than 0.02% ortho-isomers)	2267	4	4	4	R	4	4	0	0	(1)	1	0			S	1
Alkylaryl phosphate mixtures (more than 40% Diphenyl tolyl phosphate, less than 0.02% ortho-isomers)	280		RTECS No						CAS No							
Alkylated phenols (C4-C9)	2273	0	2	0	NR	1	0	1	0	(2)	1	1			Fp	2
Alkylated (C4-C9) hindered phenols	2575		RTECS No						CAS No							
Alkyl (C12-C15) benzene/indane/indene mixture	1872	0	4	4	NR	0	NI	0	0	0	0	2			FE	2
Alkylbenzene, alkylindane, alkylindene mixture (each C12-C17)	103		RTECS No						CAS No							
Alkyl benzene distillation bottoms	300	0	2	2	NR	0	(3)	0	0	1	1	1			Fp	2
Alkyl benzene distillation bottoms	3106		RTECS No						CAS No							
Alkylbenzene mixtures (containing at least 50% of toluene)	2303	(2)	(2)	(2)	(R)	(3)	(0)	0	0	(2)	2	2	ACMNR		FE	3
Alkylbenzene mixtures (containing at least 50% of toluene)	2909		RTECS No						CAS No							
Alkyl (C3-C4) benzenes	2206	(3)	NI	(3)	R	4	NI	0	0	(2)	(2)	(1)			FE	2
Alkyl (C3-C4) benzenes	91		RTECS No						CAS No							
Alkyl (C5-C8) benzenes	2207	5	4	4	(NR)	4	NI	0	0	(2)	(2)	(1)			F	2
Alkyl (C5-C8) benzenes	92		RTECS No						CAS No							

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EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Alkyl benzenes, C9-C17 (straight or branched)	1783	0	4	4	NR	1	NI	0	(0)	(1)	(1)	(1)			F	1
Alkyl(C9+)benzenes	100		RTECS No						CAS No							
Dodecyl benzene sulphononic acid (contains 1.5% Sulphuric acid)	1739	NI	NI	3	R	3	1	1	(1)	(2)	(1)	(1)			D	2
Alkyl (C11-C17) benzene sulphononic acid	101		RTECS No						CAS No							
Alkyl(C11-C13)benzenesulphonates, straight chain	301	3	3	3	R	3	1	1	(1)	(3)	2	3			FD	3
Alkylbenzene sulphononic acid, sodium salt solution	102		RTECS No			DB4370000			CAS No			42615-29-2				
Dodecyl-, Tetradecyl-, Hexadecyl-dimethylamine mixture	2248	3	NI	3	R	5	2	1	(1)	(3)	3C	3			F	3
Alkyl (C12+) dimethylamine	2485		RTECS No						CAS No							
Alkyl dithiocarbamate (C19-C35)	2236	0	NI	0	NI	1	NI	0	0	(0)	0	0			S	0
Alkyl dithiocarbamate (C19-C35)	2538		RTECS No						CAS No							
Alkyl dithio thiadiazole (C6-C24) (LOA)	1981	5	NI	5	NR	1	NI	0	0	(0)	0	0			S	2
Alkyl dithio thiadiazole (C6-C24)	104		RTECS No						CAS No							
Alkyl(C4-C20) ester copolymer (LOA)	1986	NI	0	0	NR	0	NI	0	0	(0)	0	0			Fp	2
Alkyl ester copolymer (C4-C20)	2202		RTECS No						CAS No							
Alkyl[(C8-C10)/(C12-C14)]:(<40%/>60%)polyglucoside mixture solution (max 55% active material)	2134	3	NI	3	R	3	0	0	0	(3)	2	3			D	3
Alkyl (C8-C10)/(C12-C14):(40% or less/60% or more) polyglucoside solution (55% or less)	2248		RTECS No						CAS No			141464-42-8				
Alkyl[(C8-C10)/(C12-C14)]:(>60%/<40%)polyglucoside mixture solution (max 55% active material)	2135	3	NI	3	R	2	0	0	0	(2)	2	2			D	2
Alkyl (C8-C10)/(C12-C14):(60% or more/40% or less) polyglucoside solution(55% or less)	2246		RTECS No						CAS No			141464-42-8				
Alkyl (C7-C9) nitrates	8	4	NI	4	NR	3	NI	0	0	(3)	2	(3)	S		F	3
Alkyl (C7-C9) nitrates	93		RTECS No						CAS No							
Nonyl(C6-C12)phenol poly(4-12)ethoxylate	1063	4	NI	4	NR	3	1	0	0	(2)	2	1			D	2
Alkyl(C7-C11)phenol poly(4-12) ethoxylate	97		RTECS No						CAS No							
Alkyl(C8-C40)phenol sulphide (LOA)	1985	0	NI	0	NR	0	NI	0	0	(1)	1	1			FD	1
Alkyl (C8-C40) phenol sulphide	2253		RTECS No						CAS No							
Alkyl(C8-C9)phenylamine, in aromatic solvent (LOA)	2096	2	NI	2	NR	3	NI	(0)	(0)	(2)	2	2			S	2
Alkyl (C8-C9) phenylamine in aromatic solvents	2200		RTECS No						CAS No							
ACTACLEAR 1700 Carrier Fluid (TN)	2188	0	NI	0	NR	0	NI	0	0	(2)	2	2			FD	2
Alkyl (C9-C15) phenyl propoxylate	2430		RTECS No						CAS No							
Alkyl(C8-C10)polyglucoside solution (max 65% active material)	2136	1	NI	1	R	2	0	0	0	(2)	2	2			D	2
Alkyl (C8-C10) polyglucoside solution (65% or less)	2245		RTECS No						CAS No			68515-73-1				

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EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Alkyl (C8-C10)/(C12-C14):(50%/50%) polyglucoside solution (55% or less)	2133	3	NI	3	R	2	0	0	0	(3)	2	(3)			D	3
Alkyl (C8-C10)/(C12-C14):(50%/50%) polyglucoside solution (55% or less)	2247		RTECS No						CAS No							
Alkyl(C12-C14)polyglucoside solution (max 55% active material)	2137	3	NI	3	R	3	0	0	0	(3)	2	3			D	3
Alkyl (C12-C14) polyglucoside solution (55% or less)	2249		RTECS No						CAS No		110615-47-9					
Linear alkyl(C12-16)propoxyamine ethoxylate	2380	3	0	0	NR	4	NI	1	(1)	(3)	3	(3)	S		D	3
Alkyl(C12-C16) propoxyamine ethoxylate	3423		RTECS No						CAS No							
Saturated and unsaturated alkyl (C10-C20) phosphite (LOA)	2108	0	NI	0	R	1	NI	0	0	(0)	0	0			Fp	2
Alkyl(C10-C20, saturated and unsaturated) phosphite	96		RTECS No						CAS No							
Alkylsulphonic acid ester of phenol (MESAMOLL)	1878	5	NI	5	NR	0	NI	0	(0)	(0)	0	0			S	0
Alkyl sulphonic acid ester of phenol	1701		RTECS No						CAS No		91082-17-6					
Alkyltoluenes	2374	0	2	2	NR	0	NI	0	(0)	(1)	0	1			Fp	2
Alkyl (C18+) toluenes	3148		RTECS No						CAS No							
Alkyltoluenesulfonic acid, calcium salts	2373	0	NI	0	NR	0	NI	0	0	(3)	3	1	S		S	3
Alkyltoluenesulphonic acid, calcium salts	3149		RTECS No						CAS No							
Allyl alcohol	28	0	0	0	R	4	NI	2	3	4	2	3	A		D	3
Allyl alcohol	105		RTECS No		BA5075000				CAS No		107-18-6					
3-Chloropropylene	478	1	1	1	R	3	NI	1	0	2	1	3	T		E	3
Allyl chloride	106		RTECS No		UC7350000				CAS No		107-05-1					
Aluminium chloride/hydrogen chloride solution	336	Inorg	NI	2	Inorg	3	1	1	(0)	3	(3C)	3			D	3
Aluminium chloride (30% or less)/Hydrochloric acid (20% or less) solution	110		RTECS No						CAS No							
Aluminium sulphate solution	2205	Inorg	Inorg	2	Inorg	3	1	1	(0)	(3)	(2)	(3)			D	3
Aluminium sulphate solution	111		RTECS No						CAS No							
2-(2-Aminoethoxy) ethanol	75	0	0	0	NR	1	0	0	1	(3)	3	3			D	3
2-(2-Aminoethoxy) ethanol	37		RTECS No		KJ6125000				CAS No		929-06-6					
Aminoethylethanolamine/Aminoethyldiethanolamine solution	74	Inorg	0	0	NR	1	0	(2)	(1)	(3)	(3B)	(2)	S		D	3
Aminoethyldiethanolamine/Aminoethylethanolamine solution	113		RTECS No						CAS No							
Aminoethylethanolamine	68	0	0	0	NR	1	0	0	0	0	3B	2	S		D	3
Aminoethyl ethanolamine	112		RTECS No		KJ6300000				CAS No		111-41-1					
N-Aminoethylpiperazine	88	0	0	0	NR	1	NI	0	2	(3)	3	3	S		D	3
N-Aminoethylpiperazine	472		RTECS No		TK8050000				CAS No		140-31-8					

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2-Amino-2-(hydroxymethyl)-1,3-propanediol solution(40% or less)	89	0	NI	0	NI	1	NI	0	0	NI	NI	NI			D	NI
2-Amino-2-hydroxymethyl-1,3-propanediol solution (40% or less)	38		RTECS No		TY2900000				CAS No		77-86-1					
2-Amino-2-methyl-1-propanol	90	0	0	0	NR	1	NI	0	0	(3)	3	3			DE	3
2-Amino-2-methyl-1-propanol	39		RTECS No		UA5950000				CAS No		124-68-5					
Ammonia (anhydrous and aqueous, 28% or less)	91	0	0	0	R	3	2	1	(2)	3	3	3			DE	3
Ammonia aqueous (28% or less)	114		RTECS No		BO0875000				CAS No		7664-41-7					
Ammonium bisulphite solution, greater than 15%	1730	NI	NI	NI	NI	1	NI	NI	NI	NI	2	2			D	2
Ammonium bisulphite solution (70% or less)	115		RTECS No		WT3595000				CAS No		10192-30-0					
Ammonium chloride solution (less than 25%)	2388	0	NI	0	Inorg	1	0	0	(0)	(2)	2	2			D	2
Ammonium chloride solution (less than 25%) drilling brines	3411		RTECS No		BP4550000				CAS No		12125-02-9					
Diammonium hydrogen phosphate	98	0	0	0	Inorg	1	NI	0	0	(0)	(1)	(1)			D	1
Ammonium hydrogen phosphate solution	117		RTECS No						CAS No		7783-28-0					
Ammonium lignosulphonate (46% solution in water)	2086	0	NI	0	NR	0	NI	0	(0)	(0)	0	0			D	0
Ammonium lignosulphonate solutions	118		RTECS No						CAS No		8061-53-0					
Ammonium nitrate solutions	1912	Inorg	0	0	Inorg	1	NI	0	0	(2)	1	2			D	2
Ammonium nitrate solution (93% or less)	119		RTECS No						CAS No							
Ammonium polyphosphate solution	1764	Inorg	0	0	Inorg	1	NI	0	0	0	1	0			D	1
Ammonium polyphosphate solution	120		RTECS No						CAS No		10-34-0					
Ammonium sulphate	99	0	0	0	Inorg	1	(0)	0	(0)	(0)	0	0			D	0
Ammonium sulphate solution	121		RTECS No		BS4500000				CAS No		7783-20-2					
Ammonium sulphide soln.(45% or less)	310	Inorg	0	0	Inorg	3	NI	1	0	(2)	2	2	N		D	2
Ammonium sulphide solution (45% or less)	122		RTECS No		BS4900000				CAS No		12124-99-1					
Ammonium thiocyanate/ Ammonium thiosulphate solution	1732	Inorg	0	0	Inorg	1	NI	1	NI	NI	NI	NI			D	NI
Ammonium thiocyanate (25% or less)/Ammonium thiosulphate (20% or less) solution	123		RTECS No						CAS No							
Ammonium thiosulphate solution (60% or less)	312	Inorg	0	0	Inorg	1	NI	0	(0)	(1)	(1)	(1)			D	1
Ammonium thiosulphate solution (60% or less)	124		RTECS No		XN6465000				CAS No		7783-18-8					
Amyl acetate	255	2	2	2	NR	2	NI	0	(0)	0	1	1	S	NT	FED	2
Amyl acetate (all isomers)	125		RTECS No		AJ1925000				CAS No		628-63-7					
1-Pentanol	1110	1	1	1	(R)	1	0	1	0	(3)	2	3			FED	3
n-Amyl alcohol	473		RTECS No		SB9800000				CAS No		71-41-0					

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3-Methyl-1-butanol	965	1	1	1	(R)	1	0	1	0	(2)	2	2			FED	2
Amyl alcohol, primary	126		RTECS No		EL5425000				CAS No		123-51-3					
2-Pentanol	1111	1	1	1	R	1	0	0	(0)	(2)	2	2			D	2
sec-Amyl alcohol	637		RTECS No		SA4900000				CAS No		6032-29-7					
2-Methyl-2-butanol	964	1	1	1	R	1	0	1	1	1	3	2			D	3
tert-Amyl alcohol	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			ED	2
tert-Amyl methyl ether	2210		RTECS No						CAS No							
Aniline	261	0	0	0	R	3	2	2	2	3	1	3	CTS	NT	FD	3
Aniline	127		RTECS No		BW6650000				CAS No		62-53-3					
Apple juice	275	0	NI	0	R	0	0	0	0	0	0	0			D	0
Apple juice	130		RTECS No						CAS No							
Aryl polyolefin (C11-C50) (LOA)	1979	NI	NI	0	NR	0	NI	0	0	0	0	0			Fp	2
Aryl polyolefins (C11-C50)	131		RTECS No						CAS No							
Aviation alkylates (C8 paraffins and iso-paraffins BPT 95-120 Celcius)	286	(5)	NI	(5)	(R)	(4)	NI	0	0	(0)	(0)	(0)			FE	2
Aviation alkylates (C8 paraffins and iso-paraffins BPT 95 - 120°C)	132		RTECS No						CAS No							
Barium long chain alkaryl sulphonate (C11-C50) (LOA)	1978	4	NI	4	NR	3	NI	2	0	(2)	0	0			S	2
Barium long chain (C11-C50) alkaryl sulphonate	2370		RTECS No						CAS No							
Benzene	324	2	1	1	R	2	NI	1	0	0	2	2	CTM	NT	E	3
Benzene and mixtures having 10% benzene or more (i)	133		RTECS No		CY1400000				CAS No		71-43-2					
Benzene sulphonyl chloride	320	1	1	1	R	(1)	NI	1	(2)	(3)	3	3			SD	3
Benzene sulphonyl chloride	134		RTECS No		DB8750000				CAS No		98-09-9					
1,2,4-Benzene tricarboxylic acid, trioctyl ester	1733	0	0	0	NR	0	NI	0	(0)	2	1	1			Fp	2
Benzenetricarboxylic acid, trioctyl ester	136		RTECS No						CAS No							
Benzyl acetate	348	1	NI	1	R	3	1	1	0	2	1	1			SD	2
Benzyl acetate	138		RTECS No		AF5075000				CAS No		140-11-4					
Benzyl alcohol	349	1	NI	1	R	2	NI	1	1	2	2	2			SD	2
Benzyl alcohol	139		RTECS No		DN3150000				CAS No		100-51-6					
Benzyl chloride	352	NI	1	1	R	3	1	1	(2)	3	3	3	CSA		S	3
Benzyl chloride	140		RTECS No		XS8925000				CAS No		100-44-7					

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Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl), 4-hydroxy-C7-C9 alcohols branched and linear	2378	0	3	3	NR	3	0	0	0	(0)	0	0			Fp	2
3,5-bis(1,1-dimethylethyl)-4-hydroxybenzenepropanoic acid, (C7-C9)-branched alkyl esters	3405		RTECS No						CAS No							
N,N-Bis(2-hydroxyethyl)oleamide (LOA)	2110	5	NI	5	NR	NI	NI	0	0	(2)	2	2			Fp	2
N,N-bis(2-hydroxyethyl) oleamide	2201		RTECS No						CAS No							
Borax, anhydrous or hydrated, crude or refined	359	Inorg	0	0	Inorg	1	0	0	0	(1)	1	1	R		S	3
Borax	143		RTECS No				VZ2275000		CAS No				1303-96-4			
Boric acid	360	Inorg	0	0	Inorg	1	0	0	(0)	(1)	1	1	R		S	3
Boric acid	2254		RTECS No				ED4550000		CAS No				10043-35-3			
Pol (2-8) alkylene (C2-C3) glycols/ Polyalkylene (C2-C10) glycols monoalkyl ethers and their borate esters	2358	(1)	NI	(1)	(R)	(1)	(0)	0	0	0	2	2			D	2
Brake fluid base mix: Poly(2-8)alkylene (C2-C3) glycols/Polyalkylene (C2-C10) glycols monoalkyl (C1-C4) ethers and their borate esters	144		RTECS No						CAS No							
Bromochloromethane	2084	1	1	1	NR	1	NI	0	0	0	1	0			SD	1
Bromochloromethane	145		RTECS No				PA5250000		CAS No				74-97-5			
1-Bromopropane	2229	2	NI	2	NI	NI	NI	0	(0)	0	(2)	(2)			SD	2
1-Bromopropane	2696		RTECS No						CAS No							
Butene oligomer	386	0	NI	0	NR	(4)	0	0	0	0	0	1			FE	2
Butene oligomer	146		RTECS No						CAS No							
Butyl acetate	387	1	NI	1	R	2	NI	0	0	2	0	1			FED	2
Butyl acetate (all isomers)	147		RTECS No				AF7350000		CAS No				123-86-4			
Butyl acrylate	390	2	NI	2	R	3	NI	1	1	1	2	2	SA		FED	2
Butyl acrylate (all isomers)	148		RTECS No				UD3150000		CAS No				141-32-2			
Butanol	381	0	(0)	0	R	0	NI	0	0	0	2	3		NT	D	3
Butyl alcohol (all isomers)	2216		RTECS No				EO1400000		CAS No				71-36-3			
Butanol	381	0	(0)	0	R	0	NI	0	0	0	2	3		NT	D	3
n-Butyl alcohol	474		RTECS No				EO1400000		CAS No				71-36-3			
sec-Butanol	383	0	(0)	0	R	0	NI	0	0	0	0	2		NT	D	2
sec-Butyl alcohol	638		RTECS No				EO1750000		CAS No				78-92-2			
tert-Butanol	384	0	0	0	NR	1	NI	0	0	0	1	3		NT	D	3
tert-Butyl alcohol	686		RTECS No				EO1925000		CAS No				75-65-0			
Butylamine	392	0	NI	0	R	2	NI	2	2	3	3C	3			DE	3

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Butylamine (all isomers)	154		RTECS No		EO2975000				CAS No		109-73-9					
Butyl benzene	1774	4	NI	4	NI	4	1	0	0	(2)	2	1			Fp	2
Butylbenzene (all isomers)	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		S	3
Butyl benzyl phthalate	149		RTECS No		TH9990000				CAS No		85-68-7					
Butyl butyrate	399	2	NI	2	(R)	2	NI	0	0	(1)	1	NI			FE	2
Butyl butyrate (all isomers)	150		RTECS No		ES8120000				CAS No		109-21-7					
Butyl/Decyl/Cetyl/Eicosyl methacrylate mixture	2295	(5)	NI	(5)	(R)	(3)	NI	0	0	0	2	2	S		FE	2
Butyl/Decyl/Cetyl/Eicosyl methacrylate mixture	153		RTECS No						CAS No							
Butylene glycol(s)	402	0	NI	0	R	1	NI	1	0	0	0	0			D	1
Butylene glycol	156		RTECS No		EK0525000				CAS No		110-63-4					
1,2-Butylene oxide	403	0	NI	0	NR	2	NI	1	1	2	1	1	C		DE	3
1,2-Butylene oxide	8		RTECS No		EK3675000				CAS No		106-88-7					
Di-butyl ether	578	3	3	3	NR	2	NI	0	0	0	1	1			FE	2
n-Butyl ether	475		RTECS No		EK5425000				CAS No		142-96-1					
Butyl methacrylate	409	2	NI	2	NR	1	NI	0	0	0	2	2	S		FE	2
Butyl methacrylate	151		RTECS No		OZ3675000				CAS No		97-88-1					
Butyl octyl phthalate	410	5	NI	5	(R)	0	2	0	(0)	(1)	(1)	(1)			Fp	2
Butyl octyl phthalate	2749		RTECS No						CAS No		84-78-6					
Butyl propionate	1483	2	NI	2	R	2	NI	0	0	0	1	1			FED	2
n-Butyl propionate	476		RTECS No		UE8245000				CAS No		590-01-2					
Butyl stearate	413	0	NI	0	(R)	0	NI	0	NI	NI	2	NI			Fp	2
Butyl stearate	152		RTECS No		WI2900000				CAS No		123-95-5					
Butyraldehyde	416	1	NI	1	R	2	0	0	1	0	3	3			DE	3
Butyraldehyde (all isomers)	157		RTECS No		ES2275000				CAS No		123-72-8					
Butyric acid	418	0	NI	0	R	2	0	0	0	0	3A	3			D	3
Butyric acid	158		RTECS No		ES5425000				CAS No		107-92-6					
Butyrolactone	420	0	NI	0	R	(3)	NI	1	(0)	0	0	1	C		D	3
gamma-Butyrolactone	360		RTECS No		LU3500000				CAS No		96-48-0					
Calcium alkyl phenol sulphide,polyolefin phosphorosulphide mixture (LOA)	1435	NI	NI	NI	NR	4	NI	0	0	(0)	NI	NI			NI	NI

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Calcium alkyl (C9) phenol sulphide/Polyolefin phosphorosulphide mixture	160		RTECS No						CAS No							
Calcium alkyl salicylate	2015	3	NI	3	NR	2	NI	0	0	(2)	2	2			Fp	2
Calcium alkyl (C10-C28) salicylate	3152		RTECS No						CAS No							
Calcium carbonate slurry	2016	Inorg	0	0	Inorg	0	NI	0	(0)	(1)	0	1			S	2
Calcium carbonate slurry	161		RTECS No		FF9335000				CAS No		471-34-1					
Calcium hydroxide	431	Inorg	0	0	Inorg	2	NI	0	(0)	(2)	1	2			S	2
Calcium hydroxide slurry	162		RTECS No		EW2800000				CAS No		1305-62-0					
Calcium hypochlorite solutions containing less than 15% but more than 1.5% Ca(OCl)2	2073	Inorg	0	0	Inorg	(4)	NI	1	0	2	3A	3			D	3
Calcium hypochlorite solution (15% or less)	163		RTECS No		NH3485000				CAS No		7778-54-3					
Calcium hypochlorite solutions containing 15% Ca(OCl)2 or more	432	Inorg	0	0	Inorg	5	NI	1	0	2	3A	3			D	3
Calcium hypochlorite solution (more than 15%)	164		RTECS No		NH3485000				CAS No		7778-54-3					
Calcium lignosulphonate (52% solution in water)	2087	0	NI	0	NR	0	NI	0	(0)	(0)	0	0			D	0
Calcium lignosulphonate solutions	165		RTECS No						CAS No		8061-52-7					
Calcium long chain alkaryl sulphonate (C11-C50) (LOA)	1973	NI	0	0	NR	0	NI	0	0	(1)	1	1	S		FD	2
Calcium long-chain alkaryl sulphonate (C11-C50)	169		RTECS No						CAS No							
Calcium long chain alkyl (C5-C10) phenate (LOA)	2106	0	NI	0	NR	2	NI	0	0	(0)	0	0			FD	1
Calcium long-chain alkyl(C5-C10) phenate	168		RTECS No						CAS No							
Calcium long chain alkyl (C11-C40) phenate (LOA)	2097	0	NI	0	NR	0	NI	0	0	(1)	1	1			Fp	2
Calcium long-chain alkyl(C11-C40) phenate	167		RTECS No						CAS No							
Calcium long chain alkyl phenate sulphide (C8-C40) (LOA)	1756	0	NI	0	NR	1	NI	0	0	(1)	1	1			Fp	2
Calcium long-chain alkyl phenate sulphide (C8-C40)	170		RTECS No						CAS No							
[OLOA 224]	1728	NI	NI	NI	NR	0	NI	0	0	(1)	1	(1)			Fp	2
Calcium long-chain alkyl phenolic amine (C8-C40)	171		RTECS No						CAS No							
Calcium alkyl (long chain) salicylate (overbased) in mineral oil (LOA)	70	0	NI	0	NR	2	NI	0	0	(1)	(1)	(1)	S		Fp	3
Calcium long-chain alkyl salicylate (C13+)	166		RTECS No						CAS No							
Calcium long-chain alkyl (C18-C28) salicylate	2383	0	NI	0	NR	0	NI	0	0	(1)	1	0	S		Fp	3
Calcium long-chain alkyl (C18-C28) salicylate	3426		RTECS No						CAS No							
Calcium nitrate/ Magnesium nitrate/Potassium chloride solution	1734	Inorg	0	0	Inorg	1	0	0	(0)	(1)	(1)	1			D	1
Calcium nitrate/Magnesium nitrate/Potassium chloride solution	173		RTECS No						CAS No							
Calcium nitrate	1803	Inorg	0	0	Inorg	0	NI	0	(0)	(1)	1	1			D	1

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Calcium nitrate solutions (50% or less)	172		RTECS No		EW2985000				CAS No		10124-37-5					
Camphor oil, white	1897	NI	NI	NI	NI	NI	NI	2	NI	(2)	1	NI		(T)	FE	2
Camphor oil	174		RTECS No		EX1490000				CAS No		8008-51-3					
Caprolactam	436	0	NI	0	R	1	0	1	1	4	1	2			D	3
epsilon-Caprolactam (molten or aqueous solutions)	310		RTECS No		CM3675000				CAS No		105-60-2					
Carbolic oil	437	(3)	3	(3)	(NR)	(3)	(1)	2	2	3	3	3	ATNCM		FED	3
Carbolic oil	176		RTECS No						CAS No							
Carbon disulphide	439	2	1	1	NR	3	NI	2	(3)	4	3A	3	RN		SD	3
Carbon disulphide	177		RTECS No		FF6650000				CAS No		75-15-0					
Tetrachloromethane	1296	2	2	2	NR	3	0	0	0	0	1	1	CT		S	3
Carbon tetrachloride	178		RTECS No		FG4900000				CAS No		56-23-5					
Cashew nut shell oil	443	0	NI	0	R	0	NI	(0)	(0)	(2)	2	(2)	S		Fp	3
Cashew nut shell oil (untreated)	179		RTECS No						CAS No							
Castor oil (containing less than 10% free fatty acids)	2314	0	NI	0	R	(2)	NI	0	0	(1)	1	1			Fp	2
Castor oil	3044		RTECS No						CAS No							
Cesium Formate, drilling brines	2384	0	3	3	Inorg	2	NI	1	0	(2)	2	2			D	2
Cesium formate solution drilling brines	3421		RTECS No						CAS No		3495-36-1					
Cetyl/Eicosyl methacrylate (mixture)	445	0	NI	0	(NR)	(0)	NI	0	(0)	(1)	(1)	(1)			Fp	2
Cetyl/Eicosyl methacrylate mixture	180		RTECS No						CAS No							
Chlorinated paraffins (C10-C13) with 60% chlorine or more	2021	5	5	5	NR	5	2	0	0	(1)	1	1	C		S	3
Chlorinated paraffins (C10-C13)	181		RTECS No						CAS No							
Chlorinated paraffins (C10- C13) with less than 60% chlorine	2020	5	5	5	NR	5	3	(0)	(0)	(1)	(1)	(1)	C		S	3
Chlorinated paraffins (C10-C13) (60% chlorine or less)	2832		RTECS No						CAS No							
Chlorinated paraffins (C14-C17) with less than 1% shorter chain length	2112	5	4	4	NR	6	3	0	0	(2)	2	2	C		S	3
Chlorinated paraffins (C14-C17) (with 50% chlorine or more, and less than 1% C13 or shorter chains)	182		RTECS No						CAS No							
Chlorinated paraffins (C18 and above) with any level of chlorine	2024	0	4	4	NR	0	2	0	0	(1)	(1)	(1)	C		S	3
Chlorinated paraffins (C18+) with any level of chlorine	183		RTECS No						CAS No							
Chloroacetic acid	450	0	NI	0	R	2	0	2	3	(4)	3C	3	A		D	3
Chloroacetic acid (80% or less)	184		RTECS No		AF8575000				CAS No		79-11-8					
Chlorobenzene	456	2	2	2	NR	3	0	1	0	2	2	0			S	2

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Chlorobenzene	185		RTECS No		CZ0175000				CAS No		108-90-7					
Trichloromethane	1328	1	1	1	NR	2	0	2	0	2	1	1	CT		SD	3
Chloroform	186		RTECS No		FS9100000				CAS No		67-66-3					
Chlorohydrins	463	0	NI	0	R	0	NI	(2)	(2)	(3)	(3A)	3	CS		D	3
Chlorohydrins (crude)	187		RTECS No		TY4025000				CAS No		96-24-2					
N-(3-Chloro-2-hydroxypropyl) trimethylammonium chloride solution (75% or less)	2286	0	0	0	NR	1	NI	0	0	(2)	0	(2)	SC		D	3
N-(3-Chloro-2-hydroxypropyl)trimethyl ammonium chloride solution (75% or less)	2579		RTECS No						CAS No							
MCPA-dimethylammonium (ISO)	1536	2	NI	2	NI	2	NI	1	0	2	1	1	S		S	2
4-Chloro-2-methylphenoxyacetic acid, dimethylamine salt solution	62		RTECS No						CAS No							
Chloronitrobenzenes	467	2	2	2	NR	3	NI	2	2	2	1	1			S	2
o-Chloronitrobenzene	533		RTECS No		CZ0855000				CAS No		25167-93-5					
1-(4-Chlorophenyl)-4,4-dimethyl-3-pentanone	1772	3	3	3	NR	3	NI	0	0	(1)	1	0			S	1
1-(4-Chlorophenyl)-4,4- dimethyl-pentan-3-one	21		RTECS No						CAS No							
2-Chloropropionic acid	474	0	NI	0	R	1	NI	1	(3)	2	3A	3			D	3
2- or 3-Chloropropionic acid	36		RTECS No		UE8570000				CAS No		598-78-7					
Chlorosulphonic acid	479	Inorg	0	0	Inorg	2	NI	(2)	(3)	4	3C	3			D	3
Chlorosulphonic acid	188		RTECS No		FX5730000				CAS No		7790-94-5					
m-Chlorotoluene	481	3	NI	3	NR	2	NI	2	0	2	1	1			S	2
m-Chlorotoluene	426		RTECS No		XS8990000				CAS No		108-41-8					
o-Chlorotoluene	480	3	3	3	NR	3	1	2	0	2	1	1			S	2
o-Chlorotoluene	534		RTECS No		XS9000000				CAS No		95-49-8					
p-Chlorotoluene	482	3	3	3	NR	3	0	0	0	2	1	1			S	2
p-Chlorotoluene	551		RTECS No		XS9010000				CAS No		106-43-4					
o-Chlorotoluene	480	3	3	3	NR	3	1	2	0	2	1	1			S	2
Chlorotoluenes (mixed isomers)	189		RTECS No		XS9000000				CAS No		95-49-8					
Choline chloride, solutions	485	0	NI	0	R	1	NI	0	(0)	(0)	0	0			D	0
Choline chloride solutions	190		RTECS No		KH2975000				CAS No		67-48-1					
Citric acid	493	0	NI	0	R	1	0	0	(0)	(3)	1	3			D	3
Citric acid (70% or less)	748		RTECS No		GE7350000				CAS No		77-92-9					
Clay	495	Inorg	0	0	Inorg	0	0	0	0	0	0	0			S	0

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Clay slurry	191		RTECS No						CAS No							
Coal slurry	498	Inorg	0	0	Inorg	0	0	0	0	0	0	0			S	0
Coal slurry	192		RTECS No						CAS No							
Coal tar	499	(4)	4	4	NR	3	1	0	0	0	2	2	CMR	(T)	S	3
Coal tar	193		RTECS No		GF8600000				CAS No		8007-45-2					
Coal tar naphtha	500	3	NI	3	NR	3	NI	0	0	(1)	1	1	C	(T)	FE	3
Coal tar naphtha solvent	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		S	3
Coal tar pitch (molten)	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		FE	3
Cobalt naphthenate in solvent naphtha	196		RTECS No						CAS No							
Cocoa butter	2342	0	NI	0	R	0	NI	(0)	(0)	(1)	(0)	(1)			Fp	2
Cocoa butter	3096		RTECS No						CAS No							
Coconut acid oil	2370	0	0	0	R	3	NI	(0)	(0)	(1)	(1)	(1)			Fp	2
Coconut acid oil	3139		RTECS No						CAS No							
Coconut fatty acid distillate	2366	0	NI	0	R	(3)	NI	0	(0)	(1)	(1)	(1)			Fp	2
Coconut fatty acid distillate	3130		RTECS No						CAS No							
Coconut oil	503	0	NI	0	R	1	NI	0	(0)	(1)	0	(1)			Fp	2
Coconut oil	2772		RTECS No		GG6040000				CAS No		8001-31-8					
Coconut oil fatty acid	505	0	0	0	(R)	(3)	NI	0	(0)	(1)	(1)	(1)			Fp	2
Coconut oil fatty acid	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)			Fp	2
Coconut oil fatty acid methyl ester	198		RTECS No						CAS No		61788-59-8					
Copper salt of long chain(>C17) alkanolic acid (LOA)	2111	0	NI	0	(R)	2	NI	0	0	(0)	0	0			Fp	2
Copper salt of long chain (C17+) alkanolic acid	2214		RTECS No						CAS No							
Corn oil	521	0	NI	0	R	(2)	NI	0	(0)	(1)	1	1			Fp	2
Corn Oil	2781		RTECS No		GM4800000				CAS No		8001-30-7					
Cotton seed oil	523	0	NI	0	R	(2)	NI	(0)	(0)	(1)	0	1			Fp	2
Cotton seed oil	2783		RTECS No		GN2815000				CAS No		8001-29-4					
Creosote (coal tar)	524	(4)	(4)	(4)	NR	4	(2)	1	0	2	2	1	CM	(T)	S	3

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Creosote (coal tar)	199		RTECS No		GF8615000				CAS No		8001-58-9					
Creosote (wood tar)	525	NI	NI	NI	NR	5	NI	1	0	2	2	1	CM	(T)	SD	3
Creosote (wood)	200		RTECS No		GO5870000				CAS No		8021-39-4					
Cresols (mixed isomers)	527	2	2	2	R	3	0	2	2	(3)	3A	3		T	SD	3
Cresols (all isomers)	201		RTECS No		GO5950000				CAS No		1319-77-3					
Cresylic acids, dephenolized	1875	2	2	2	R	3	0	(2)	(2)	(3)	(3A)	(3)		(T)	S	3
Cresylic acid, dephenolized	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
Cresylic acid, sodium salt solution	203		RTECS No						CAS No							
Crotonaldehyde	528	0	NI	0	NR	4	1	2	4	4	2	3	S		D	3
Crotonaldehyde	204		RTECS No		GP9499000				CAS No		4170-30-3					
alpha-Methylbenzyl alcohol with acetophenone (15% or less)	2399	1	NI	1	(R)	(1)	NI	(1)	(0)	(3)	(2)	(3)	R		Fp	3
Crude alpha-Methylbenzyl alcohol	3634		RTECS No						CAS No		98-85-1					
Crude Piperazine	2331	0	NI	0	R	2	NI	(1)	(2)	(3)	3	3	S		D	3
Crude Piperazine	2810		RTECS No						CAS No							
1,5,9-Cyclododecatriene	534	5	5	5	NR	4	NI	0	0	2	2	2	SA		F	3
1,5,9-Cyclododecatriene	17		RTECS No		GU2308000				CAS No		4904-61-4					
Cycloheptane	535	4	NI	4	(NR)	4	NI	(0)	0	(1)	(0)	(1)			FE	2
Cycloheptane	205		RTECS No		GU3140000				CAS No		291-64-5					
Cyclohexane	536	3	3	3	NR	3	NI	0	0	1	0	1			E	2
Cyclohexane	206		RTECS No		GU6300000				CAS No		110-82-7					
Cyclohexanol	537	1	NI	1	R	2	NI	0	0	0	2	2			Fp	2
Cyclohexanol	207		RTECS No		GV7875000				CAS No		108-93-0					
Cyclohexanone	539	0	1	1	R	1	0	1	1	1	2	2			FE	2
Cyclohexanone	208		RTECS No		GW1050000				CAS No		108-94-1					
Cyclohexanone/Cyclohexanol mixture	1436	1	1	1	R	2	NI	1	1	1	2	2			FED	2
Cyclohexanone, Cyclohexanol mixture	209		RTECS No						CAS No							
Cyclohexyl acetate	541	2	NI	2	(R)	(2)	NI	0	0	(2)	2	1			FED	2
Cyclohexyl acetate	210		RTECS No		AG5075000				CAS No		622-45-7					
Cyclohexylamine	542	1	NI	1	R	2	NI	2	2	3	3	3	S		D	3

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Cyclohexylamine	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			Fp	2
1,3-Cyclopentadiene dimer (molten)	11		RTECS No		PC1050000				CAS No		77-73-6					
Cyclopentane	546	3	NI	3	NR	3	NI	(0)	(0)	0	1	(1)			E	2
Cyclopentane	212		RTECS No		GY2390000				CAS No		287-92-3					
Cyclopentene	547	2	NI	2	NI	3	NI	1	1	0	NI	NI			E	2
Cyclopentene	213		RTECS No		GY5950000				CAS No		142-29-0					
Isopropyltoluenes	549	4	4	4	(NR)	3	NI	0	(0)	1	2	(1)			FE	2
p-Cymene	552		RTECS No		GZ5950000				CAS No		99-87-6					
Decahydronaphthalene	551	4	4	4	NR	3	NI	0	0	(1)	1	1			F	1
Decahydronaphthalene	214		RTECS No		QJ3150000				CAS No		91-17-8					
Decane	554	5	NI	5	R	0	0	0	0	0	1	0			F	1
Decane	2620		RTECS No		HD6550000				CAS No		124-18-5					
Decanoic acid	555	4	NI	4	R	4	1	0	0	(2)	2	2			Fp	2
Decanoic acid	215		RTECS No		HD9100000				CAS No		334-48-5					
1-Decene	558	5	NI	5	R	4	2	0	0	0	2	0	A		F	3
Decene	216		RTECS No						CAS No		872-05-9					
Decyl acetate	1767	4	NI	4	NI	NI	NI	0	0	(1)	(1)	(1)			F	1
Decyl acetate	217		RTECS No						CAS No		112-17-4					
Decyl acrylate	559	5	NI	5	NI	5	NI	0	0	(2)	2	1			Fp	2
Decyl acrylate	218		RTECS No		AS7400000				CAS No		2156-96-9					
Isodecanol	557	3	2	2	R	3	NI	0	0	0	2	1			Fp	2
Decyl alcohol (all isomers)	219		RTECS No		NR0960000				CAS No		25339-17-7					
Alcohols, linear (C10-C14)	2365	(5)	(2)	(2)	(R)	(4)	(1)	0	0	(2)	(2)	(2)			Fp	2
Decyl/Dodecyl/Tetradecyl alcohol mixture	3128		RTECS No						CAS No							
Decyloxytetrahydrothiophene dioxide	1859	3	NI	3	NR	4	NI	0	0	(1)	1	0			Fp	2
Decyloxytetrahydrothiophene dioxide	220		RTECS No						CAS No							
Dextrose solution	562	0	0	0	R	0	NI	0	0	0	0	(0)			D	0
Dextrose solution	221		RTECS No		LZ6600000				CAS No		50-99-7					
Diacetone alcohol	563	0	NI	0	R	1	0	0	0	(2)	2	2			D	2

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Diacetone alcohol	226		RTECS No		SA9100000				CAS No		123-42-2					
Dialkyldiphenylamines (LOA)	1852	5	NI	5	NR	1	0	0	0	(0)	0	0			FD	0
Dialkyl (C8-C9) diphenylamines	2255		RTECS No						CAS No							
Dialkyl phthalates C9-C13	566	(0)	(4)	(4)	(NR)	(0)	(2)	(0)	(0)	(1)	(1)	(1)	R		Fp	3
Dialkyl (C7-C13) phthalates	227		RTECS No						CAS No							
Dialkyl (C9 - C10) phthalates	2359	(0)	(0)	(0)	(R)	(0)	(0)	(0)	(0)	(1)	(1)	(1)			Fp	2
Dialkyl (C9 - C10) phthalates	3121		RTECS No						CAS No							
[AERO 7249 Promoter / Mixture of dithiophosphate salts in water.]	2381	1	0	1	NR	2	NI	0	0	(2)	2	2			D	2
Dialkyl thiophosphates sodium salts solution	3424		RTECS No						CAS No							
Dibromomethane	574	1	NI	1	NR	(2)	NI	1	0	0	NI	NI			SD	1
Dibromomethane	228		RTECS No		PA7350000				CAS No		74-95-3					
Di-n-butylamine	577	2	NI	2	R	3	NI	2	2	3	3	3			FD	3
Dibutylamine	231		RTECS No		HR7780000				CAS No		111-92-2					
Dibutyl hydrogen phosphonate	1857	1	NI	1	NI	2	NI	0	0	(3)	3	3			F	3
Dibutyl hydrogen phosphonate	229		RTECS No						CAS No		1809-19-4					
2,4-Di-tert-butyl phenol	2083	5	4	4	NR	4	NI	NI	NI	NI	NI	NI			NI	NI
2,4-Di-tert-butylphenol	2339		RTECS No		SK8260000				CAS No		96-76-4					
2,6-Di-tert-butyl phenol	2082	4	NI	4	NR	4	NI	0	0	(1)	1	1			Fp	2
2,6-Di-tert-butylphenol	2250		RTECS No		SK8265000				CAS No		128-39-2					
Di-n-butyl phthalate	582	4	4	4	R	4	1	0	0	1	0	1	R		S	3
Dibutyl phthalate	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
Dichlorobenzene (all isomers)	232		RTECS No						CAS No							
3,4-Dichlorobut-1-ene	2079	2	2	2	NR	3	NI	1	0	2	2	3			S	3
3,4-Dichloro-1-butene	56		RTECS No		EM4740000				CAS No		760-23-6					
1,1-Dichloroethane	590	1	NI	1	NR	1	NI	1	(1)	0	2	2			SD	2
1,1-Dichloroethane	4		RTECS No		KI0175000				CAS No		75-34-3					
sym-Dichlorodiethyl ether	588	1	1	1	NR	1	0	2	3	4	1	3	M	T	SD	3
Dichloroethyl ether	233		RTECS No		KN0875000				CAS No		111-44-4					
1,6-Dichlorohexane	593	3	NI	3	NR	3	NI	0	(0)	(0)	0	0			S	0

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1,6-Dichlorohexane	19		RTECS No						CAS No		2163-00-0					
Di-(2-chloro-iso-propyl) ether	615	2	2	2	NR	2	NI	2	0	2	0	2			SD	2
2,2'-Dichloroisopropyl ether	25		RTECS No		KN1750000				CAS No		108-60-1					
Dichloromethane	594	1	2	2	NR	1	0	1	0	0	2	2	C		SD	3
Dichloromethane	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
2,4-Dichlorophenol	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
2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution	32		RTECS No						CAS No							
2,4-Dichlorophenoxyacetic acid, dimethylamine salt, 70 % or less solution	600	0	1	1	R	3	NI	1	0	(3)	1	3		(T)	D	3
2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution (70% or less)	33		RTECS No						CAS No							
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt soln.	602	0	NI	0	R	2	NI	1	0	(3)	(1)	3		(T)	D	3
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution	34		RTECS No						CAS No							
1,1-Dichloropropane	605	2	1	1	NR	2	1	0	0	1	1	1			SD	1
1,1-Dichloropropane	5		RTECS No		TX9450000				CAS No		78-99-9					
1,2-Dichloropropane	606	2	1	1	NR	2	1	1	0	2	2	2			SD	2
1,2-Dichloropropane	9		RTECS No		TX9625000				CAS No		78-87-5					
1,3-Dichloropropane	607	2	1	1	NR	2	1	0	NI	NI	NI	NI			SD	NI
1,3-Dichloropropane	12		RTECS No		TX9660000				CAS No		142-28-9					
1,3-Dichloropropene	612	1	NI	1	NR	4	1	2	1	2	3	3	CS		SD	3
1,3-Dichloropropene	13		RTECS No		UC8310000				CAS No		542-75-6					
Dichloropropane and dichloropropene, mixture	608	2	1	1	NR	4	1	2	1	2	3	3	CS		SD	3
Dichloropropene/Dichloropropane mixtures	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			D	3
2,2-Dichloropropionic acid	28		RTECS No		UF0690000				CAS No		75-99-0					
Dicyclopentadiene(80-90%)/Co-dimers(10-20%), mixtures	2389	2	3	3	NR	3	0	2	0	3	2	2	AR		FED	3
Dicyclopentadiene, Resin Grade, 81-89%	3559		RTECS No						CAS No							
Diethanolamine	620	0	NI	0	R	1	0	1	0	0	2	3	T		D	3
Diethanolamine	236		RTECS No		KL2975000				CAS No		111-42-2					
Diethylamine	621	0	NI	0	R	2	NI	1	2	3	3C	3			DE	3

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Diethylamine	240		RTECS No		HZ8750000				CAS No		109-89-7					
Diethyl ethanolamine	622	0	NI	0	NR	3	NI	1	1	2	3	3			D	3
Diethylaminoethanol	241		RTECS No		KK5075000				CAS No		100-37-8					
2,6-Diethylaniline	1437	3	3	3	NR	2	NI	1	1	(2)	1	2			FD	2
2,6-Diethylaniline	35		RTECS No		BX3500000				CAS No		579-66-8					
Diethyl benzene (mixed isomers)	624	4	4	4	NR	3	NI	0	(0)	(2)	2	1			F	2
Diethylbenzene	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		Fp	3
Di-(2-ethylbutyl) phthalate	2750		RTECS No		TI1100000				CAS No		84-75-3					
Diethylene glycol	628	0	NI	0	R	0	0	1	0	2	1	1			D	2
Diethylene glycol	243		RTECS No		ID5950000				CAS No		111-46-6					
Diethylene glycol di-n-butyl ether	629	2	NI	2	NI	1	NI	0	0	(1)	1	1			FD	1
Diethylene glycol dibutyl ether	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			D	2
Diethylene glycol diethyl ether	245		RTECS No		KN3160000				CAS No		112-36-7					
Diethylene glycol initiated polyoxypropylene diamine	2353	0	NI	0	NR	2	NI	0	0	(3)	3B	(3)			D	3
Diethylene glycol initiated polyoxypropylene diamine	3113		RTECS No						CAS No							
Diethylene glycol phthalate	1438	2	NI	2	NR	1	NI	0	0	(2)	(1)	2			S	2
Diethylene glycol phthalate	247		RTECS No						CAS No							
Diethylene triamine	638	0	1	1	(R)	2	NI	1	3	3	3A	3	S		FD	3
Diethylenetriamine	248		RTECS No		IE1225000				CAS No		111-40-0					
Diethylenetriamine pentaacetic acid, pentasodium salt (40% solution in water)	2076	0	NI	0	NR	0	NI	0	(0)	(0)	0	0			D	0
Diethylenetriaminepentaacetic acid, pentasodium salt solution	249		RTECS No						CAS No							
Diethyl ether	640	0	1	1	NR	0	NI	1	0	0	1	1			DE	2
Diethyl ether	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		Fp	3
Di-(2-ethylhexyl) adipate	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			Fp	2
Di-(2-ethylhexyl) phosphoric acid	223		RTECS No		TB7875000				CAS No		298-07-7					
Di-(2-ethylhexyl) phthalate	642	0	4	4	R	0	0	0	0	1	1	1	R		Fp	3

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Di-(2-ethylhexyl) phthalate	2751		RTECS No		Ti0350000				CAS No		117-81-7					
Diethyl phthalate	648	3	3	3	R	2	0	0	0	(1)	1	1			S	1
Diethyl phthalate	238		RTECS No		Ti1050000				CAS No		84-66-2					
Diethyl sulphate	649	1	NI	1	(NR)	(2)	NI	1	2	3	2	3	CM		SD	3
Diethyl sulphate	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		S	2
Diglycidyl ether of bisphenol A	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		S	3
Diglycidyl ether of bisphenol F	251		RTECS No						CAS No		55492-52-9					
Diheptyl phthalate	655	0	(4)	(4)	R	0	NI	0	0	(1)	1	1	R		Fp	3
Diheptyl phthalate	252		RTECS No		Ti1090000				CAS No		3648-21-3					
Di-n-hexyl adipate	656	5	NI	5	(NR)	5	0	0	0	(1)	0	1			FE	1
Di-n-hexyl adipate	224		RTECS No		AV1150000				CAS No		110-33-8					
Di-hexyl phthalate	2125	5	NI	5	R	0	2	0	0	(1)	1	1	R		Fp	3
Dihexyl phthalate	253		RTECS No		Ti1100000				CAS No		84-75-3					
1,4-Dihydro-9,10-dihydroxy anthracene disodium salt (soln.)	657	1	NI	1	NI	1	NI	0	NI	NI	NI	NI			D	NI
1,4-Dihydro-9,10-dihydroxyanthracene, disodium salt solution	15		RTECS No						CAS No							
Diisobutylamine	576	2	NI	2	R	3	NI	2	(2)	2	(3)	(3)			FED	3
Diisobutylamine	256		RTECS No		TX1750000				CAS No		110-96-3					
Diisobutene	575	4	4	4	NR	3	NI	0	0	0	1	0			FE	2
Diisobutylene	257		RTECS No		SB2715000				CAS No		11071-47-9					
Diisobutyl ketone	579	3	NI	3	R	2	NI	0	0	2	2	2			F	2
Diisobutyl ketone	254		RTECS No		MJ5775000				CAS No		108-83-8					
Diisobutyl phthalate	581	4	(4)	4	R	4	1	0	0	1	0	0	R		S	3
Diisobutyl phthalate	255		RTECS No		Ti1225000				CAS No		84-69-5					
Diisodecyl phthalate	619	0	0	0	(R)	0	(0)	0	0	(1)	0	1			Fp	2
Diisodecyl phthalate	3119		RTECS No		Ti1270000				CAS No		26761-40-0					
Diisoheptyl phthalate	2391	0	(4)	(4)	R	0	0	0	0	(1)	1	1	R		Fp	3
Diisoheptyl phthalate	3561		RTECS No						CAS No							
Diisononyl adipate	690	0	NI	0	R	0	0	0	0	(1)	1	1			Fp	2

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Diisononyl adipate	258		RTECS No						CAS No		33703-08-1					
Diisononyl phthalate	691	0	0	0	R	0	0	0	0	(0)	0	0			Fp	2
Diisononyl phthalate	3120		RTECS No						CAS No							
Diisooctyl phthalate	693	0	4	4	(R)	0	0	0	0	(1)	1	0			Fp	2
Diisooctyl phthalate	259		RTECS No			TI1300000			CAS No		27554-26-3					
Diisopropanolamine	703	0	NI	0	NR	1	NI	0	0	0	2	3			FD	3
Diisopropanolamine	260		RTECS No			UB6600000			CAS No		110-97-4					
Diisopropylamine	705	1	NI	1	NR	2	0	1	1	2	3	3			ED	3
Diisopropylamine	261		RTECS No			IM4025000			CAS No		108-18-9					
Diisopropyl benzene (mixed isomers)	2220	5	4	4	NR	4	NI	0	0	2	2	1		(T)	F	2
Diisopropylbenzene (all isomers)	262		RTECS No						CAS No							
1,3-Diisopropylbenzene	706	5	4	4	NR	4	NI	0	0	2	2	1			F	2
1,3-Diisopropyl benzene	2626		RTECS No			CZ6330000			CAS No		25321-09-9					
Diisopropylnaphthalene, mixed isomers	712	5	4	4	NR	(3)	NI	0	0	(1)	1	1			Fp	2
Diisopropylnaphthalene	263		RTECS No			QJ1527000			CAS No		38640-62-9					
Dimethyl acetamide	658	0	NI	0	R	1	NI	0	0	2	1	2			D	2
N,N-Dimethylacetamide	2730		RTECS No			AB7700000			CAS No		127-19-5					
Dimethyl acetamide	658	0	NI	0	R	1	NI	0	0	2	1	2			D	2
N,N-Dimethylacetamide solution (40% or less)	466		RTECS No			AB7700000			CAS No		127-19-5					
Dimethyl adipate	659	1	NI	1	NR	4	NI	0	0	2	1	1			SD	2
Dimethyl adipate	264		RTECS No			AV1645000			CAS No		627-93-0					
Dimethylamine (40-50% aq.sol.)	661	0	NI	0	R	3	0	2	0	2	3B	3	S	NT	DE	3
Dimethylamine solution (45% or less)	270		RTECS No			IP8750000			CAS No		124-40-3					
Dimethylamine (40-50% aq.sol.)	661	0	NI	0	R	3	0	2	0	2	3B	3	S	NT	DE	3
Dimethylamine solution (greater than 45% but not greater than 55%)	271		RTECS No			IP8750000			CAS No		124-40-3					
Dimethylamine (40-50% aq.sol.)	661	0	NI	0	R	3	0	2	0	2	3B	3	S	NT	DE	3
Dimethylamine solution (greater than 55% but not greater than 65%)	272		RTECS No			IP8750000			CAS No		124-40-3					
N,N-Dimethyl cyclohexylamine	665	2	NI	2	NR	2	NI	1	2	3	3C	3			FD	3
N,N-Dimethylcyclohexylamine	467		RTECS No			GX1198000			CAS No		98-94-2					
Dimethyl disulphide	1616	1	NI	1	NR	3	2	2	0	2	1	1			SD	2

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Dimethyl disulphide	2504		RTECS No		JO1927500				CAS No		624-92-0					
N,N-Dimethyldodecylamine	2126	3	NI	3	R	4	NI	1	(1)	(3)	3	3			F	3
N,N-Dimethyldodecylamine	468		RTECS No		JR6600000				CAS No		112-18-5					
Dimethylethanolamine	667	0	NI	0	R	2	NI	1	1	2	3	3			D	3
Dimethylethanolamine	273		RTECS No		KK6125000				CAS No		108-01-0					
Dimethyl formamide	676	0	0	0	R	1	0	0	1	2	1	2	R		D	3
Dimethylformamide	274		RTECS No		LQ2100000				CAS No		68-12-2					
Dimethyl glutarate	670	0	NI	0	R	3	NI	0	0	2	3	2	A		SD	3
Dimethyl glutarate	265		RTECS No						CAS No		26717-67-9					
Dimethyl hydrogen phosphite	673	0	NI	0	NR	2	NI	1	0	0	1	1			D	1
Dimethyl hydrogen phosphite	266		RTECS No		SZ7710000				CAS No		868-89-9					
2,2-Dimethyloctanoic acid	675	3	NI	3	R	4	1	0	0	(2)	2	2			Fp	2
Dimethyl octanoic acid	267		RTECS No						CAS No		29662-90-6					
Dimethyl phthalate	678	2	2	2	R	2	0	0	0	(1)	0	1			SD	1
Dimethyl phthalate	268		RTECS No		TI1575000				CAS No		131-11-3					
Polysiloxane	1161	NI	4	4	NI	2	NI	0	(0)	(0)	0	0			F	1
Dimethylpolysiloxane	275		RTECS No						CAS No							
2,2-Dimethylpropane-1,3-diol	679	0	0	0	NR	0	0	0	0	0	2	2			FD	2
2,2-Dimethylpropane-1,3-diol (molten or solution)	29		RTECS No		TY5775000				CAS No		126-30-7					
Dimethyl succinate	681	0	NI	0	NI	2	NI	0	0	0	0	2			SD	2
Dimethyl succinate	269		RTECS No		WM7675000				CAS No		106-65-0					
Dinitrotoluene	688	2	2	2	NR	4	2	2	(2)	(2)	1	0	CMR		S	3
Dinitrotoluene (molten)	276		RTECS No		XT1300000				CAS No		25321-14-6					
Dinonyl phthalate	689	0	NI	0	R	0	0	0	0	(1)	1	1			Fp	2
Dinonyl phthalate	2993		RTECS No		TI1800000				CAS No		84-76-4					
Di-n-octyl phthalate	692	0	(4)	(4)	(R)	0	0	0	0	(1)	1	(1)			Fp	2
Diocetyl phthalate	277		RTECS No		TI1925000				CAS No		117-84-0					
1,4-Dioxane	682	0	0	0	NR	0	0	0	0	0	0	2	C		D	3
1,4-Dioxane	16		RTECS No		JG8225000				CAS No		123-91-1					
Dipentene	686	4	NI	4	NR	2	NI	0	0	(2)	2	2	S		F	3

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Dipentene	278		RTECS No		OS8100000				CAS No		138-86-3					
Diphenyl	694	3	4	4	R	4	1	0	0	(2)	2	1			S	2
Diphenyl	279		RTECS No		DU8050000				CAS No		92-52-4					
Diphenylamine (molten)	2186	3	3	3	NR	3	1	0	0	(1)	1	1			S	1
Diphenylamine (molten)	285		RTECS No						CAS No							
Diphenylamine, reaction product with 2,4,4-trimethylpentene	1500	NI	1	1	NR	3	NI	0	0	(1)	1	1	S		Fp	3
Diphenylamine, reaction product with 2,2,4-Trimethylpentene	286		RTECS No						CAS No							
Diphenylamines, alkylated	1770	5	NI	5	NR	(3)	NI	0	0	(1)	(1)	(1)	S		F	3
Diphenylamines, alkylated	287		RTECS No						CAS No							
Diphenyl/Diphenyl ether (mixtures)	698	NI	NI	4	NR	4	1	0	0	(1)	1	1		(T)	S	1
Diphenyl/Diphenyl ether mixtures	283		RTECS No		DV1500000				CAS No		8004-13-5					
Diphenyl ether	699	4	4	4	NR	4	NI	0	0	0	1	1		T	S	1
Diphenyl ether	281		RTECS No		KN8970000				CAS No		101-84-8					
Diphenyl ether/ Biphenyl phenyl ether mixtures	702	5	NI	5	NR	4	NI	0	0	0	1	1		(T)	S	1
Diphenyl ether/Diphenyl phenyl ether mixture	282		RTECS No						CAS No							
Diphenylmethane-4,4'-diisocyanate	700	5	2	2	NR	0	0	0	0	4	2	2	S		S	3
Diphenylmethane diisocyanate	288		RTECS No		NQ9350000				CAS No		101-68-8					
Diphenylol propane-epichlorohydrin resins	2237	3	NI	3	NR	4	NI	0	0	(2)	1	2			S	2
Diphenylol propane-epichlorohydrin resins	290		RTECS No						CAS No							
Di-n-propylamine	704	1	NI	1	NR	3	NI	2	2	2	3C	3			FED	3
Di-n-propylamine	225		RTECS No		JL9200000				CAS No		142-84-7					
Dipropylene glycol	707	0	1	1	NR	0	NI	0	0	0	1	1			D	1
Dipropylene glycol	291		RTECS No		UB8785000				CAS No		110-98-5					
Dipropylene glycol dibenzoate	708	4	NI	4	R	NI	NI	0	(0)	NI	NI	NI			NI	NI
Dipropylene glycol dibenzoate	2431		RTECS No		UB8787500				CAS No		94-51-9					
Di-n-propyl phthalate	713	3	NI	3	(R)	3	NI	0	0	(1)	1	1	R		S	3
Di-n-propyl phthalate	2752		RTECS No		TI1940000				CAS No		131-16-8					
Dithiocarbamate ester (C7-C35)	2185	NI	2	2	NR	4	NI	0	0	(1)	1	1			S	1
Dithiocarbamate ester (C7-C35)	2371		RTECS No						CAS No							
Ditridecyl adipate	2351	0	NI	0	NR	0	NI	0	0	(2)	2	1	S		Fp	2

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Ditridecyl adipate	293		RTECS No						CAS No							
Ditridecyl phthalate	714	0	(0)	0	NR	0	(0)	0	0	(1)	1	(1)			Fp	2
Ditridecyl phthalate	2994		RTECS No		TI1950000				CAS No		119-06-2					
Diundecyl phthalate	715	0	(0)	0	NR	0	0	0	0	(1)	1	1			Fp	2
Diundecyl phthalate	294		RTECS No		TI1980000				CAS No		3648-20-2					
Dodecane	718	5	NI	5	(R)	0	NI	0	0	(1)	(1)	(0)			Fp	2
Dodecane (all isomers)	295		RTECS No		JR2125000				CAS No		112-40-3					
tert-Dodecanethiol	2233	5	NI	5	NR	4	2	0	0	(2)	2	1	S		F	3
tert-Dodecanethiol	2418		RTECS No						CAS No							
Dodecene (all isomers)	720	5	NI	5	NR	4	NI	0	0	(2)	2	1	A		F	3
Dodecene (all isomers)	296		RTECS No		UD1950000				CAS No		6842-15-5					
2-Dodecenyl succinic acid, dipotassium salt, solution	727	4	NI	4	NR	1	NI	(0)	(0)	NI	NI	NI			D	NI
Dodecenylsuccinic acid, dipotassium salt solution	297		RTECS No						CAS No		57195-28-5					
1-Dodecanol	719	5	2	2	R	4	1	0	0	(1)	1	(1)			Fp	2
Dodecyl alcohol	298		RTECS No		JR5775000				CAS No		112-53-8					
Dodecylamine/Tetradecylamine mixture	721	3	NI	3	R	4	NI	1	0	(3)	3	3			F	3
Dodecylamine/Tetradecylamine mixture	303		RTECS No						CAS No							
Dodecyl benzene	126	0	NI	0	NR	0	3	0	0	(2)	(2)	(1)			F	2
Dodecylbenzene	304		RTECS No		CZ9540000				CAS No		123-01-3					
Dodecyl diphenyl oxide disulphonate (solns.)	723	(5)	NI	5	NR	4	1	1	0	(3)	1	3			D	3
Dodecyl diphenyl ether disulphonate solution	299		RTECS No		JR8050000				CAS No							
Dodecyl hydroxypropyl sulphide (LOA)	1861	5	NI	5	NI	4	NI	0	0	(0)	0	0			FD	0
Dodecyl hydroxypropyl sulphide	2252		RTECS No						CAS No							
Lauryl methacrylate	893	5	NI	5	NR	0	NI	0	(0)	(1)	1	1			F	1
Dodecyl methacrylate	300		RTECS No		OZ4300000				CAS No		142-90-5					
Dodecyl/octadecyl methacrylate (mixtures)	2116	(5)	NI	(5)	(NR)	(0)	NI	0	0	(1)	1	(1)			Fp	2
Dodecyl/Octadecyl methacrylate mixture	1717		RTECS No						CAS No							
Dodecyl/pentadecyl methacrylate (mixture)	724	(5)	NI	(5)	(NR)	(0)	NI	0	(0)	(1)	(1)	(1)			Fp	2
Dodecyl/Pentadecyl methacrylate mixture	302		RTECS No						CAS No							
Dodecyl phenol	725	0	4	4	NI	4	NI	0	0	(3)	3	2			Fp	3

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Dodecyl phenol	301		RTECS No		SL3675000				CAS No		27193-86-8					
Dodecylxylene	1763	0	NI	0	NI	0	NI	0	0	(1)	1	1			Fp	2
Dodecyl Xylene	306		RTECS No						CAS No							
Zinc chloride	1425	Inorg	4	4	Inorg	4	1	(1)	(1)	(3)	(3)	(3)			D	3
Drilling brines (containing zinc salts)	307		RTECS No		ZH1400000				CAS No		7646-85-7					
Calcium bromide (solutions)	427	Inorg	0	0	Inorg	1	0	(0)	(0)	(2)	(1)	(2)			D	2
Drilling brines, including:calcium bromide solution, calcium chloride solution and sodium chloride solution	308		RTECS No		EV9328000				CAS No		7789-41-5					
Epichlorohydrin	731	0	NI	0	R	3	1	2	2	3	3A	3	CS		D	3
Epichlorohydrin	309		RTECS No		TX4900000				CAS No		106-89-8					
Ethanolamine	733	0	NI	0	R	2	0	1	1	3	3A	3			D	3
Ethanolamine	311		RTECS No		KJ5775000				CAS No		141-43-5					
Ethylene glycol monoethyl ether	766	0	NI	0	R	0	0	0	0	1	2	2	R		NI	3
2-Ethoxyethanol	40		RTECS No		KK8050000				CAS No		110-80-5					
Ethylene glycol ethyl ether acetate	767	0	NI	0	R	2	0	1	0	1	1	2	R		D	3
2-Ethoxyethyl acetate	41		RTECS No		KK8225000				CAS No		111-15-9					
Ethoxylated long chain (>C16)alkyloxyalkanamine (LOA)	2103	5	NI	5	NR	1	NI	0	0	(3)	3	(3)			Fp	3
Ethoxylated long chain (C16+) alkyloxyalkylamine	2203		RTECS No						CAS No							
Ethoxylated tallow amine (>95%)	2313	0	NI	0	NR	4	NI	1	(1)	3	2	3	S		Fp	3
Ethoxylated tallow amine (> 95%)	2959		RTECS No						CAS No							
Ethoxylated tallow amine, glycol mixture	2252	2	NI	2	NR	6	NI	1	0	3	2	3	S		D	3
Ethoxylated tallow amine, glycol mixture	2476		RTECS No						CAS No							
Ethyl acetate	735	0	2	2	R	1	0	0	0	1	0	1			DE	2
Ethyl acetate	312		RTECS No		AH5425000				CAS No		141-78-6					
Ethyl acetoacetate	736	0	0	0	R	1	NI	0	0	(1)	1	1			D	1
Ethyl acetoacetate	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
Ethyl acrylate	314		RTECS No		AT0700000				CAS No		140-88-5					
Ethanol	732	0	NI	0	R	0	NI	0	0	0	1	2			D	2
Ethyl alcohol	315		RTECS No		KQ6300000				CAS No		64-17-5					
Ethylamine	1016	0	NI	0	R	2	NI	2	2	1	3	3			GD	3

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Ethylamine	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			DE	3
Ethylamine solutions (72% or less)	323		RTECS No						CAS No							
Ethyl amyl ketone	1784	2	NI	2	NI	2	NI	0	0	(2)	2	NI			FD	2
Ethyl amyl ketone	316		RTECS No		RH1485000				CAS No		106-68-3					
Ethylbenzene	740	3	2	2	R	3	1	0	0	0	2	2	C		FE	3
Ethylbenzene	324		RTECS No		DA070000				CAS No		100-41-4					
N-Ethyl butylamine	745	1	NI	1	NI	NI	NI	1	1	2	3	3			FED	3
N-Ethylbutylamine	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			E	2
Ethyl tert-butyl ether	320		RTECS No		KN4730200				CAS No		637-92-3					
Ethyl butyrate	748	1	NI	1	NI	2	NI	0	0	(2)	2	NI			FED	2
Ethyl butyrate	317		RTECS No		ET1660000				CAS No		105-54-4					
Ethyl cyclohexane	751	4	4	4	NR	3	NI	(0)	(0)	(1)	(0)	(1)			FE	2
Ethylcyclohexane	325		RTECS No		GV1140000				CAS No		1678-91-7					
N-Ethyl cyclohexylamine	752	2	NI	2	NI	(3)	NI	1	2	2	3	3			FED	3
N-Ethylcyclohexylamine	478		RTECS No		GX1225000				CAS No		5459-93-8					
EPTC (ISO)	2081	3	2	2	NI	3	NI	1	1	2	2	(2)	N		F	3
S-Ethyl dipropylthiocarbamate	2302		RTECS No						CAS No		759-94-4					
Ethylene carbonate	755	0	NI	0	R	0	NI	0	0	(2)	1	2			SD	2
Ethylene carbonate	326		RTECS No		FF9550000				CAS No		96-49-1					
Ethylene chlorohydrin	756	0	0	0	R	3	NI	2	3	4	2	3			D	3
Ethylene chlorohydrin	327		RTECS No		KK0875000				CAS No		107-07-3					
Ethylene cyanohydrin	757	0	0	0	NI	2	NI	1	0	(2)	1	2			D	2
Ethylene cyanohydrin	328		RTECS No		MU5250000				CAS No		109-78-4					
Ethylene diamine	758	0	1	1	R	3	1	1	2	1	3	3	S		D	3
Ethylenediamine	343		RTECS No		KH8575000				CAS No		107-15-3					
Ethylene diamine, tetra acetic acid, di- and tetra-sodium salt	759	0	NI	0	NR	2	0	1	(1)	(2)	1	2			D	2
Ethylenediaminetetraacetic acid, tetrasodium salt solution	344		RTECS No		AH4375000				CAS No		#Error					
Ethylene dibromide	760	1	2	2	NR	3	NI	2	2	2	3	3	CRT		SD	3

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Ethylene dibromide	329		RTECS No		KH9275000				CAS No		106-93-4					
1,2-Dichloroethane	591	1	1	1	NR	2	0	1	0	2	1	2	C		SD	3
Ethylene dichloride	330		RTECS No		KI0525000				CAS No		107-06-2					
Ethylene glycol	761	0	NI	0	R	0	0	1	(1)	(1)	0	0	R		D	3
Ethylene glycol	331		RTECS No		KW2975000				CAS No		107-21-1					
Ethylene glycol monoacetate	762	0	NI	0	R	2	NI	0	0	(3)	NI	(3)	R		D	3
Ethylene glycol acetate	333		RTECS No		KW7175000				CAS No		542-59-6					
Ethylene glycol butyl ether acetate	764	1	NI	1	R	2	NI	0	1	(1)	1	1			FD	1
Ethylene glycol butyl ether acetate	334		RTECS No		KJ8925000				CAS No		112-07-2					
Ethylene glycol diacetate	765	0	NI	0	NI	2	NI	0	0	(1)	1	NI			D	1
Ethylene glycol diacetate	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			D	NI
Ethylene glycol methyl butyl ether	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		D	3
Ethylene glycol methyl ether acetate	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			D	2
Ethylene glycol monoalkyl ethers	338		RTECS No						CAS No							
Ethylene glycol phenyl ether	775	1	NI	1	R	1	0	1	0	(2)	1	2			SD	2
Ethylene glycol phenyl ether	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)			SD	2
Ethylene glycol phenyl ether/Diethylene glycol phenyl ether mixture	340		RTECS No						CAS No							
Ethylene oxide	77	NI	NI	NI	NI	NI	NI	1	(1)	3	3	3	CMRS		GD	3
Ethylene oxide	2744		RTECS No		KX2450000				CAS No		75-21-8					
Propylene oxide/Ethylene oxide mixture	78	0	NI	0	R	1	NI	1	1	3	3	3	CMR		DE	3
Ethylene oxide/Propylene oxide mixture with an ethylene oxide content of not more than 30% by mass	341		RTECS No						CAS No							
Ethylene vinyl acetate copolymer (emulsion)	779	0	1	1	NR	0	0	0	(0)	(2)	2	0			S	NI
Ethylene-vinyl acetate copolymer (emulsion)	342		RTECS No						CAS No							
Ethyl-3-ethoxypropionate	1439	1	NI	1	NR	2	NI	0	0	2	1	1			FD	2
Ethyl-3-ethoxypropionate	321		RTECS No		UF3325000				CAS No		763-69-9					
2-Ethylhexanoic acid	776	2	NI	2	R	2	NI	0	0	(2)	2	2	R		FD	3

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2-Ethylhexanoic acid	45		RTECS No		MO7700000				CAS No		149-57-5					
2-Ethylhexyl acrylate	782	3	NI	3	R	2	NI	0	0	(2)	2	2	S		F	3
2-Ethylhexyl acrylate	46		RTECS No		AT0855000				CAS No		103-11-7					
Isooctylamine	1081	2	NI	2	NI	3	NI	1	1	3	3	3			FD	3
2-Ethylhexylamine	48		RTECS No		MQ5250000				CAS No		104-75-6					
Mobil syndril E51	2221	0	NI	0	R	1	NI	0	(0)	(0)	1	0			F	1
2-Ethylhexyl esters of fatty acids	2578		RTECS No						CAS No							
2-Ethyl-2-(hydroxymethyl)propane-1,3-diol C8-C10 ester (LOA)	2054	0	NI	0	R	0	NI	0	(0)	(0)	0	(0)			Fp	2
2-Ethyl-2-(hydroxymethyl) propane-1,3-diol (C8-C10) ester	42		RTECS No						CAS No							
5-Ethylidene-2-norbornene	783	3	3	3	NR	3	0	0	0	2	1	2			FE	2
Ethylidene norbornene	345		RTECS No		RB9450000				CAS No		16219-75-3					
Ethyl isoamyl ketone	737	NI	NI	NI	NI	NI	NI	0	0	(1)	1	(2)			FD	2
Ethyl isoamyl ketone	2618		RTECS No		MJ7350000				CAS No		541-85-5					
Ethyl methacrylate	785	1	NI	1	R	2	NI	0	0	0	(2)	(2)	S		FE	2
Ethyl methacrylate	318		RTECS No		OZ4550000				CAS No		97-63-2					
N-Ethyl-2-methallylamine	2228	0	NI	0	NR	2	NI	3	2	2	3A	3			D	3
N-Ethylmethylallylamine	2417		RTECS No						CAS No							
o-Ethyl phenol	788	2	NI	2	NI	(2)	NI	1	NI	NI	NI	NI			S	NI
o-Ethylphenol	535		RTECS No		SL4025000				CAS No		90-00-6					
Ethyl propionate	790	1	NI	1	NI	2	0	0	(1)	(2)	2	2			ED	2
Ethyl propionate	319		RTECS No		UF3675000				CAS No		105-37-3					
2-Ethyl-3-propyl acrolein	791	2	NI	2	R	3	NI	0	0	1	3	3			FE	3
2-Ethyl-3-propylacrolein	43		RTECS No		MP6300000				CAS No		645-62-5					
Ethyl toluene (all isomers)	2297	3	NI	3	NI	(3)	NI	0	0	0	2	2			F	2
Ethyl toluene	346		RTECS No						CAS No							
Tetradecanoic acid (Myristic acid)	1298	5	NI	0	R	0	NI	0	(0)	(1)	(1)	(1)			Fp	2
Fatty acid (saturated C13+)	347		RTECS No		QH4375000				CAS No		544-63-8					
Fatty acids, essentially linear, C6-C18, 2-ethylhexyl ester	2253	0	NI	0	R	1	NI	0	0	(1)	1	0			Fp	2
Fatty acid (C8-C16) ethyl hexyl esters	2759		RTECS No						CAS No							
Fatty acid methyl esters	2362	0	NI	0	R	2	NI	0	(0)	(2)	2	2			Fp	2

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Fatty acid methyl esters (m)	3125		RTECS No						CAS No							
Fatty acids saturated, C8-C10	2324	0	NI	0	R	4	NI	0	0	(3)	3C	3			NI	NI
Fatty acids, (C8-C10)	3079		RTECS No						CAS No							
Fatty acids, linear, C8-C18 saturated with C18 unsaturated	2260	(4)	NI	(4)	R	(4)	(1)	(0)	(0)	(1)	(1)	(1)			Fp	3
Fatty acids, (C8-C18)	2779		RTECS No						CAS No							
Fatty acids, linear C12+ saturated with C12+ unsaturated	2261	5	0	0	(R)	0	NI	(0)	(0)	(1)	(1)	(1)			NI	2
Fatty acids, (C12+)	2780		RTECS No						CAS No							
Fatty acids, unsaturated, linear, C16+	2259	0	0	0	R	(0)	NI	0	0	(0)	0	0			Fp	2
Fatty acids, (C16+)	2778		RTECS No						CAS No							
Fatty acids, essentially linear, C6-C18, 2-ethylhexyl ester	2253	0	NI	0	R	1	NI	0	0	(1)	1	0			Fp	2
Fatty acids, essentially linear (C6-C18) 2-ethylhexyl ester	1914		RTECS No						CAS No							
Ferric chloride	339	Inorg	5	5	Inorg	2	0	1	(0)	(3)	2	3			D	3
Ferric chloride solutions	348		RTECS No		LJ9100000				CAS No		7705-08-0					
Ferric hydroxyethyl ethylene diamine triacetic acid, tri- sodium salt, solution	796	NI	NI	NI	NI	NI	NI	0	0	(1)	(0)	1			D	1
Ferric hydroxyethylethylenediaminetriacetic acid, trisodium salt solution	349		RTECS No						CAS No							
Ferric nitrate/nitric acid solution	337	Inorg	5	5	Inorg	2	0	0	(0)	(3)	3	3			D	3
Ferric nitrate/Nitric acid solution	350		RTECS No						CAS No							
Fish oil (containing less than 10% free fatty acids)	2316	0	NI	0	R	2	NI	(0)	(0)	(1)	(0)	(1)			Fp	2
Fish oil	3046		RTECS No						CAS No							
Fish solubles	1509	NI	NI	NI	NI	NI	NI	(0)	(0)	(0)	(0)	(0)			NI	NI
Fish solubles (water-based fish meal extract)	351		RTECS No						CAS No							
Fluorosilicic acid	806	Inorg	0	0	Inorg	2	NI	2	(2)	4	3	3			D	3
Fluorosilicic acid	2716		RTECS No		VV8225000				CAS No		16961-83-4					
Fluorosilicic acid (20-30%) in water solution	2240	Inorg	0	0	Inorg	2	NI	(1)	(1)	4	3	3			D	3
Fluorosilicic acid (20-30%) in water solution	353		RTECS No						CAS No							
Formaldehyde, polymer with isobutylenated phenol	2377	NI	NI	NI	NR	NI	NI	NI	NI	NI	NI	NI			Fp	NI
Formaldehyde, polymer with isobutylenated phenol	1203		RTECS No						CAS No							
Formaldehyde (37%-50% solution)	807	0	NI	0	R	2	NI	2	2	3	3	3	CSM	NT	D	3
Formaldehyde solutions (45% or less)	354		RTECS No		LP8925000				CAS No		50-00-0					
Formamide	808	0	NI	0	NR	1	NI	0	0	1	1	2	R		D	3

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Formamide	355		RTECS No		LQ0525000				CAS No		75-12-7					
Formic acid	809	0	NI	0	R	2	NI	1	(1)	2	3C	3			D	3
Formic acid	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
Fumaric adduct of rosin, water dispersion	357		RTECS No						CAS No							
Furfural	812	0	NI	0	R	2	NI	2	(2)	3	2	2	C		D	3
Furfural	358		RTECS No		LT7000000				CAS No		98-01-1					
Furfuryl alcohol	813	0	NI	0	R	(3)	NI	2	2	3	2	2			D	2
Furfuryl alcohol	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)			SD	2
Glucitol/glycerol blend propoxylated (containing less than 10% amines)	3074		RTECS No						CAS No							
Dextrose solution	562	0	0	0	R	0	NI	0	0	0	0	(0)			D	0
Glucose solution	361		RTECS No		LZ6600000				CAS No		50-99-7					
1,5-Pentanedial solution, (5-50%)	1107	0	NI	0	R	3	0	1	0	4	3	3	S		D	3
Glutaraldehyde solutions (50% or less)	362		RTECS No		MA2450000				CAS No		111-30-8					
Glycerine	814	0	NI	0	R	0	NI	0	0	(1)	0	1			D	1
Glycerine	363		RTECS No		MA8050000				CAS No		56-81-5					
Glycerine (83%)/ Dioxane-dimethanol (17%) mixture	1743	NI	NI	NI	R	1	NI	0	(0)	(1)	(0)	1			D	1
Glycerine (83%), Dioxanedimethanol (17%) mixture	364		RTECS No						CAS No							
Glycerol ethoxylated	2360	0	NI	0	R	0	NI	0	0	(0)	0	0			D	0
Glycerol ethoxylated	3123		RTECS No						CAS No							
Glycerol monooleate	1898	0	0	0	R	0	NI	0	(0)	(1)	1	1			Fp	2
Glycerol monooleate	365		RTECS No		RK1300000				CAS No		25496-72-4					
Glycerol propoxylated	2346	0	NI	0	NR	1	NI	1	0	(2)	1	0			D	2
Glycerol propoxylated	3110		RTECS No						CAS No							
Glycerol, propoxylated and ethoxylated	2276	0	NI	0	NR	1	0	0	0	0	0	0			SD	2
Glycerol, propoxylated and ethoxylated	2872		RTECS No						CAS No							
Glycerol/sorbitol blend, propoxylated and ethoxylated	2372	0	NI	0	NR	2	NI	NI	NI	NI	NI	NI			NI	NI
Glycerol/sorbitol blend, propoxylated and ethoxylated	3136		RTECS No						CAS No							
Glycerol/sucrose blend, propoxylated and ethoxylated	2361	0	NI	0	NR	1	NI	0	0	0	0	0			SD	0

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Glycerol/sucrose blend propoxylated and ethoxylated	3124		RTECS No						CAS No							
Glyceryl triacetate	816	0	NI	0	R	1	0	1	0	0	0	1			D	1
Glyceryl triacetate	367		RTECS No			AK3675000			CAS No			102-76-1				
Glycidyl ester of C10 trialkyl acetic acid	441	3	NI	3	NR	3	NI	0	0	(2)	2	1			F	2
Glycidyl ester of C10 trialkylacetic acid	368		RTECS No						CAS No							
Glycine, Sodium salt, solution	817	0	NI	0	NI	0	NI	0	(0)	(1)	(0)	(1)			D	1
Glycine, sodium salt solution	369		RTECS No			MB7600000			CAS No			56-40-6				
Glycolic acid	2218	0	0	0	R	1	NI	1	(1)	2	3C	3			D	3
Glycolic acid solution (70% or less)	2539		RTECS No						CAS No							
Glyoxal solutions (40% or less)	84	0	NI	0	R	1	NI	0	0	2	2	3	MS		D	3
Glyoxal solution (40% or less)	370		RTECS No			MD2700000			CAS No			107-22-2				
Glyoxylic acid	1535	0	NI	0	R	2	0	0	0	(3)	0	3	S		D	3
Glyoxylic acid solution (50 % or less)	371		RTECS No			MD4550000			CAS No			298-12-4				
Glyphosate solution, without surfactant	1765	0	0	0	NR	3	0	0	0	(3)	0	3			D	3
Glyphosate solution (not containing surfactant)	2204		RTECS No			MC1075000			CAS No			1071-83-6				
Groundnut oil	820	0	NI	0	R	(2)	NI	(0)	(0)	(0)	(0)	0			Fp	2
Groundnut oil	2769		RTECS No			RX2830000			CAS No			8002-03-7				
Heptane	827	4	NI	4	R	4	NI	0	0	0	(1)	1	A		E	2
Heptane (all isomers)	372		RTECS No			MI7700000			CAS No			142-82-5				
Heptanoic acid	831	2	NI	2	R	1	NI	0	0	(3)	3B	(3)			FD	3
n-Heptanoic acid	479		RTECS No			MJ1575000			CAS No			111-14-8				
1-Heptanol	828	2	NI	2	R	2	NI	1	0	2	(2)	(2)			FD	2
1-Heptanol	2688		RTECS No			MK0350000			CAS No			111-70-6				
Heptanol (all isomers)	2223	2	NI	2	R	(2)	NI	0	0	(2)	(1)	(2)			FD	2
Heptanol (all isomers) (d)	373		RTECS No						CAS No							
Heptene (all isomers)	2225	3	NI	3	NI	2	NI	(0)	(0)	(0)	(2)	(1)			E	2
Heptene (all isomers)	374		RTECS No						CAS No							
1-Heptene	832	3	NI	3	NI	2	NI	(0)	(0)	(0)	(2)	(1)			E	2
1-Heptene	2685		RTECS No			MJ8815000			CAS No							
Heptyl acetate	833	3	NI	3	NI	(3)	NI	0	0	(2)	1	2			F	2

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Heptyl acetate	375		RTECS No		AH9901000				CAS No		112-06-1					
Hexadecyl naphthalene/dihexadecyl naphthalene mixture	2159	0	NI	0	NR	0	NI	0	0	(1)	1	1			Fp	2
1-Hexadecyl naphthalene / 1,4-bis(hexadecyl)naphthalene mixture	2373		RTECS No						CAS No							
Hexamethylene diamine	845	0	NI	0	R	2	NI	1	1	(3)	3A	3	SR		D	3
Hexamethylenediamine	377		RTECS No		MO1180000				CAS No		124-09-4					
Hexamethylene diamine	845	0	NI	0	R	2	NI	1	1	(3)	3A	3	SR		D	3
Hexamethylenediamine (molten)	378		RTECS No		MO1180000				CAS No		124-09-4					
Hexamethylene diamine adipate, 50% in water	846	0	NI	0	R	1	NI	0	(0)	(0)	0	0			D	0
Hexamethylenediamine adipate (50% in water)	379		RTECS No		AV1940000				CAS No		3323-53-3					
Hexamethylene diamine	845	0	NI	0	R	2	NI	1	1	(3)	3A	3	SR		D	3
Hexamethylenediamine solution	380		RTECS No		MO1180000				CAS No		124-09-4					
Hexamethylene diisocyanate	2142	3	0	0	NR	2	NI	1	2	4	3	3	S		S	3
Hexamethylene diisocyanate	18		RTECS No						CAS No							
Hexamethylene glycol	847	0	NI	0	R	1	NI	0	0	(1)	0	1			D	1
Hexamethylene glycol	376		RTECS No		MO2100000				CAS No		629-11-8					
Hexamethyleneimine	848	1	NI	1	NI	2	NI	3	1	2	NI	NI			FED	2
Hexamethyleneimine	381		RTECS No		CM3150000				CAS No		111-49-9					
Hexamethylene tetramine (40% solution)	849	0	NI	0	R	0	NI	0	0	(1)	0	1	S		D	2
Hexamethylenetetramine solutions	382		RTECS No		MN4725000				CAS No		100-97-0					
Hexane	850	3	NI	3	R	4	NI	0	0	0	2	2	NA		E	2
Hexane	2683		RTECS No		MN9275000				CAS No		100-54-3					
Hexane	850	3	NI	3	R	4	NI	0	0	0	2	2	NA		E	2
Hexane (all isomers)	383		RTECS No		MN9275000				CAS No		100-54-3					
1,6-Hexanediol, distillation overheads	2143	4	NI	4	NR	2	NI	0	0	2	1	2			FED	2
1,6-Hexanediol, distillation overheads	2641		RTECS No						CAS No							
Hexanoic acid	853	2	NI	2	R	2	NI	0	0	(3)	(3)	3			FD	3
Hexanoic acid	384		RTECS No		MO5250000				CAS No		142-62-1					
1-Hexanol	854	1	0	0	(R)	2	NI	1	0	(3)	1	3			FD	3
Hexanol	385		RTECS No		MQ4025000				CAS No		111-27-3					
Hexene (all isomers)	2224	3	NI	3	R	3	NI	(0)	(0)	(1)	(1)	(1)			E	2

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Hexene (all isomers)	386		RTECS No						CAS No							
1-Hexene	855	3	NI	3	R	3	NI	0	0	0	1	1			E	2
1-Hexene	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)			E	2
2-Hexene (mixed isomers)	2682		RTECS No						CAS No							
Hexyl acetate	857	2	NI	2	NI	3	NI	0	0	(1)	1	1			FE	2
Hexyl acetate	387		RTECS No		AI0875000				CAS No		142-92-7					
Hexylene glycol	859	0	NI	0	R	0	0	0	0	(2)	2	2			D	2
Hexylene glycol	388		RTECS No		SA0810000				CAS No		107-41-5					
Hydrocarbon waxes	2278	0	NI	0	NR	0	0	0	0	2	1	1			Fp	2
Hydrocarbon waxes	2886		RTECS No						CAS No							
Hydrochloric acid	864	Inorg	0	0	Inorg	1	NI	1	1	3	3C	3			DE	3
Hydrochloric acid	389		RTECS No		MW4025000				CAS No		7647-01-0					
Hydrogenated Starch Hydrolysate	2347	0	NI	0	R	0	NI	0	0	(0)	0	0			D	0
Hydrogenated starch hydrolysate	3077		RTECS No						CAS No							
Hydrogen peroxide, more than 60%	867	Inorg	0	0	Inorg	3	NI	1	0	2	3	3			D	3
Hydrogen peroxide, more than 60%	2689		RTECS No		MX0900000				CAS No		7722-84-1					
Hydrogen peroxide, more than 8% but not more than 60%	2231	Inorg	0	0	Inorg	3	NI	1	0	(2)	3	3			D	3
Hydrogen peroxide, more than 8% but not more than 60%	2690		RTECS No						CAS No							
Hydrogen peroxide, more than 60%	867	Inorg	0	0	Inorg	3	NI	1	0	2	3	3			D	3
Hydrogen peroxide solutions (over 60% but not over 70% by mass)	390		RTECS No		MX0900000				CAS No		7722-84-1					
Hydrogen peroxide, more than 8% but not more than 60%	2231	Inorg	0	0	Inorg	3	NI	1	0	(2)	3	3			D	3
Hydrogen peroxide solutions (over 8% but not over 60% by mass)	391		RTECS No						CAS No							
Ethylene glycol acrylate	869	0	NI	0	R	4	NI	1	3	3	3	3	SM		D	3
2-Hydroxyethyl acrylate	51		RTECS No		AT1750000				CAS No		818-61-1					
N-(2-Hydroxyethyl) ethylene diamine triacetic acid, trisodium salt (solution)	870	0	NI	0	NI	1	NI	0	0	(1)	1	1	R		D	3
N-(Hydroxyethyl)ethylenediaminetriacetic acid, trisodium salt solution	470		RTECS No		MB9185000				CAS No		150-30-0					
2-Hydroxy-4-(methylthio) butanoic acid	871	1	NI	1	R	1	NI	0	0	(3)	1	3			D	3
2-Hydroxy-4-(methylthio)butanoic acid	49		RTECS No		ET4761500				CAS No		583-91-5					
Icosa(oxypropane-2,3-diyl)s	2092	NI	NI	NI	NI	NI	NI	0	(0)	(2)	2	(2)			Fp	2

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Icosa(oxypropane-2,3-diyl)s	2691		RTECS No						CAS No							
Icosa(oxypropane-2,3-diyl)s	2092	NI	NI	NI	NI	NI	NI	0	(0)	(2)	2	(2)			Fp	2
Icosa(oxypropane-2,3-diyl)s	392		RTECS No						CAS No							
Illipe oil (containing less than 10% free fatty acids)	2304	(0)	NI	(0)	(R)	(0)	NI	(0)	(0)	(0)	(0)	(0)			Fp	2
Illipe oil	3034		RTECS No						CAS No							
Interesterified Mixed Vegetable Oils	2355	0	NI	0	R	(0)	NI	(0)	(0)	(1)	(1)	(1)			Fp	2
Interesterified vegetable oils	3115		RTECS No						CAS No							
3-Methyl-1-butanol	965	1	1	1	(R)	1	0	1	0	(2)	2	2			FED	2
Isoamyl alcohol	396		RTECS No		EL5425000				CAS No		123-51-3					
Isobutanol	382	0	NI	0	R	1	0	0	0	1	2	3			D	3
Isobutyl alcohol	397		RTECS No		NP9625000				CAS No		78-83-1					
Isobutyl formate	405	1	NI	1	NI	1	NI	0	(0)	0	(1)	(2)			E	2
Isobutyl formate	398		RTECS No		LQ8650000				CAS No		542-55-2					
Isobutyl methacrylate	408	2	NI	2	NR	1	NI	0	0	0	2	2	S		FED	2
Isobutyl methacrylate	2673		RTECS No		OZ4900000				CAS No		97-86-9					
Isobutyric acid	419	0	NI	0	R	2	NI	2	2	(3)	3	3			E	NI
Isobutyric acid	2459		RTECS No		NQ4375000				CAS No		79-31-2					
Isononylaldehyde	2300	3	NI	3	NR	(3)	NI	0	0	(2)	2	1			F	2
Isononylaldehyde	2754		RTECS No						CAS No							
Isophorone	879	1	1	1	R	2	0	1	1	(2)	1	2			FD	2
Isophorone	399		RTECS No		GW7700000				CAS No		78-59-1					
Isophorone diamine	880	0	0	0	NR	2	0	1	(1)	(3)	3	3	S		D	3
Isophoronediamine	401		RTECS No		GV6129000				CAS No		2855-13-2					
Isophorone diisocyanate	881	1	NI	1	NR	4	NI	0	0	4	3	3	SA		S	3
Isophorone diisocyanate	400		RTECS No		NQ9370000				CAS No		4098-71-9					
Isoprene	882	2	2	2	NR	2	NI	0	0	0	1	2	CM		E	3
Isoprene	402		RTECS No		NT4037000				CAS No		78-79-5					
Isopropanolamine	1182	0	NI	0	R	2	NI	0	1	0	3	3			D	3
Isopropanolamine	403		RTECS No		UA5775000				CAS No		78-96-6					
Isopropyl acetate	1192	1	NI	1	R	1	NI	0	0	0	1	2			ED	2

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Isopropyl acetate	404		RTECS No		AI4930000				CAS No		108-21-4					
Isopropanol	1181	0	NI	0	R	0	0	0	0	0	1	2			D	2
Isopropyl alcohol	405		RTECS No		NT8050000				CAS No		67-63-0					
Isopropylamine	1195	0	NI	0	R	2	NI	2	2	1	3	3			DE	3
Isopropylamine	407		RTECS No		NT8400000				CAS No		75-31-0					
Isopropylamine (70%)	2350	0	NI	0	R	2	NI	2	2	1	3	3			DE	3
Isopropylamine (70% or less) solution	395		RTECS No						CAS No							
Isopropyl benzene	1197	3	2	2	R	3	NI	0	0	0	2	1			FE	2
Isopropylbenzene	2687		RTECS No		GR8575000				CAS No		98-82-8					
Isopropyl cyclohexane	1199	4	NI	4	(NR)	(3)	NI	(0)	(0)	(1)	(0)	(1)			FE	2
Isopropylcyclohexane	408		RTECS No						CAS No		696-29-7					
Diisopropyl ether	711	1	NI	1	NR	2	NI	0	0	0	1	1			E	2
Isopropyl ether	406		RTECS No		TZ5425000				CAS No		108-20-3					
Jatropha oil	2402	0	NI	(0)	(R)	(2)	NI	(0)	(0)	(0)	(0)	(0)			Fp	2
Jatropha oil	3637		RTECS No						CAS No							
Kaolin slurry	883	Inorg	NI	0	Inorg	0	NI	0	0	0	0	0			S	0
Kaolin slurry	409		RTECS No		GF1670500				CAS No		1332-58-7					
Lactic acid	886	0	NI	0	R	1	NI	0	0	(3)	2	3			D	3
Lactic acid	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			D	3
Lactonitrile solution (80% or less)	411		RTECS No		OD8225000				CAS No		78-97-7					
Lard (containing less than 10% free fatty acids)	2317	0	NI	0	R	0	NI	0	(0)	(1)	0	1			Fp	2
Lard	3047		RTECS No						CAS No							
Latex, ammonia inhibited	889	0	NI	0	R	(2)	NI	0	0	(1)	0	1			D	1
Latex, ammonia (1% or less)- inhibited	413		RTECS No						CAS No							
Styrene butadiene rubber latex	1274	0	NI	0	NR	0	NI	0	0	(1)	0	1			D	1
Latex: Carboxylated styrene-Butadiene copolymer; Styrene-Butadiene rubber	414		RTECS No						CAS No							
Lauric acid	891	4	NI	4	R	4	1	0	(0)	(2)	1	2			Fp	2
Lauric acid	415		RTECS No		OE9800000				CAS No		143-07-7					
Alkyl(C12-C14)polyglucoside solution (max 55% active material)	2137	3	NI	3	R	3	0	0	0	(3)	2	3			D	3

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Lauryl polyglucose (50% or less)	416		RTECS No						CAS No		110615-47-9					
Lecithin (soybeans)	2146	0	NI	0	R	0	NI	0	0	(0)	0	(0)			SD	0
Lecithin	417		RTECS No						CAS No							
Lignin sulphonic acid, salt solution	34	0	NI	0	(NR)	(0)	NI	0	(0)	(0)	(0)	(0)			D	0
Ligninsulphonic acid, sodium salt solution	419		RTECS No						CAS No							
Linseed oil (containing less than 4% free fatty acids)	2318	0	NI	0	R	(2)	NI	0	(0)	(1)	0	(1)			Fp	2
Linseed oil	3048		RTECS No						CAS No							
Long chain alkaryl polyether (C11-C20) (LOA)	1982	(4)	NI	(4)	NR	3	(1)	0	0	(2)	0	2			Fp	2
Long-chain alkaryl polyether (C11-C20)	421		RTECS No						CAS No							
Long chain alkaryl sulphonic acid (C16-C60) (LOA)	1966	0	NI	0	(NR)	0	NI	0	0	(2)	(1)	2			Fp	2
Long-chain alkaryl sulphonic acid (C16-C60)	424		RTECS No						CAS No							
Long-chain alkylphenate/Phenol sulphide mixture	1754	(0)	NI	(0)	(NR)	0	NI	0	0	(2)	2	2	S		Fp	3
Long-chain alkylphenate/Phenol sulphide mixture	425		RTECS No						CAS No							
OGA 480 OGA 492 (Polyether amine)	1457	NI	NI	NI	NR	2	NI	0	0	(2)	2	2			Fp	2
Long-chain polyetheramine in alkyl (C2-C4) benzenes	422		RTECS No						CAS No							
OGA 480 OGA 492 (Polyether amine)	1457	NI	NI	NI	NR	2	NI	0	0	(2)	2	2			Fp	2
Long-chain polyetheramine in aromatic solvent	423		RTECS No						CAS No							
L-Lysine solution (50% or less)	2199	0	0	0	R	1	0	0	0	0	1	NI			D	1
L-Lysine solution (60% or less)	2306		RTECS No						CAS No							
Magnesium chloride	915	Inorg	0	0	Inorg	1	0	0	0	(0)	0	0			D	0
Magnesium chloride solution	427		RTECS No		OM2800000				CAS No		7786-30-3					
Magnesium hydroxide slurry	916	Inorg	0	0	Inorg	0	NI	0	0	(1)	(0)	1			S	1
Magnesium hydroxide slurry	428		RTECS No		OM3570000				CAS No		1309-42-8					
Magnesium lignosulphonate solutions	2356	(0)	NI	(0)	(NR)	(0)	NI	0	0	(0)	(0)	(0)			D	0
Magnesium lignosulphonate solutions	3116		RTECS No						CAS No							
Magnesium long chain alkaryl sulphonate (C11-C50) (LOA)	1967	0	NI	0	NR	0	NI	0	0	(2)	1	2	S		Fp	3
Magnesium long-chain alkaryl sulphonate (C11-C50)	430		RTECS No						CAS No							
Magnesium alkyl (long chain) salicylate (overbased) in mineral oil (LOA)	71	(0)	NI	(0)	NR	(2)	NI	0	0	(1)	(1)	(1)	S		S	2
Magnesium long-chain alkyl salicylate (C11+)	429		RTECS No						CAS No							
Maleic anhydride	921	1	NI	1	R	2	0	1	2	(3)	3	3	S		D	3

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Maleic anhydride	431		RTECS No		ON3675000				CAS No		108-31-6					
Maltitol Syrup	2348	0	NI	0	R	0	NI	0	0	(0)	0	0			D	0
Maltitol solution	3078		RTECS No						CAS No							
Mango kernal oil (containing less than 10% free fatty acids)	2305	(0)	NI	(0)	(R)	(0)	NI	(0)	(0)	(0)	(0)	(0)			Fp	2
Mango kernel oil	3035		RTECS No						CAS No							
2-Mercaptobenzothiazol	925	2	1	1	NR	4	2	0	0	(0)	0	0	S		S	2
Mercaptobenzothiazol, sodium salt solution	432		RTECS No		DL6475000				CAS No		149-30-4					
Mesityl oxide	946	1	NI	1	R	(1)	NI	1	0	2	2	2			D	2
Mesityl oxide	433		RTECS No		SB4200000				CAS No		141-79-7					
Metam-sodium (ISO)	202	0	NI	0	NR	4	NI	1	2	(2)	2	1	S		D	2
Metam sodium solution	434		RTECS No		FC2100000				CAS No		137-42-8					
Methacrylic acid, inhibited	948	0	NI	0	R	2	0	1	2	2	3	3			D	3
Methacrylic acid	435		RTECS No		OZ2975000				CAS No		79-41-4					
Methacrylic acid-alkoxypoly (alkylene oxide) methacrylate co-polymer sodium salt (45% or less solution)	2288	NI	0	0	NR	1	NI	0	(0)	(1)	1	0			D	1
Methacrylic acid - alkoxypoly (alkylene oxide) methacrylate copolymer, sodium salt aqueous solution (45% or less)	2819		RTECS No						CAS No							
Methacrylic resin in 1,2 Dichloroethane soln.	2046	1	1	1	NR	2	0	(1)	(0)	(2)	(1)	(2)	C		SD	3
Methacrylic resin in ethylene dichloride	436		RTECS No						CAS No							
Methacrylonitrile	949	0	NI	0	R	2	0	3	2	4	1	1	S	NT	ED	3
Methacrylonitrile	437		RTECS No		UD1400000				CAS No		126-98-7					
Butylene glycol monomethyl ether	952	0	NI	0	R	(1)	NI	0	0	(1)	0	1			D	1
3-Methoxy-1-butanol	57		RTECS No						CAS No		2517-43-3					
Butylene glycol methyl ether acetate	953	1	1	1	R	3	NI	0	(0)	(1)	1	1			FED	1
3-Methoxybutyl acetate	58		RTECS No		EL4725000				CAS No		4435-53-4					
Metolachlor (ISO)	113	2	2	2	NR	5	1	1	0	(2)	1	0	S		S	2
N-(2-Methoxy-1-methyl ethyl)-2-ethyl-6-methyl chloroacetanilide	469		RTECS No		AN3430000				CAS No		51218-45-2					
Methyl acetate	954	0	NI	0	R	1	NI	0	0	0	1	2			DE	2
Methyl acetate	438		RTECS No		AI9100000				CAS No		79-20-9					
Methyl acetoacetate	335	0	NI	0	R	1	NI	0	0	(2)	1	2			D	2
Methyl acetoacetate	439		RTECS No		AK5775000				CAS No		105-45-3					
Methyl acrylate	955	0	NI	0	R	3	NI	1	1	2	2	3	MS		D	3

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Methyl acrylate	440		RTECS No		AT2800000				CAS No		96-33-3					
Methanol	951	0	NI	0	R	0	0	3	(3)	(4)	2	2	T		DE	3
Methyl alcohol	441		RTECS No		PC1400000				CAS No		67-56-1					
Methylamine solution 42% or less	957	0	NI	0	R	2	NI	2	(2)	3	3	3	M	NT	DE	3
Methylamine solutions (42% or less)	455		RTECS No		PF6300000				CAS No		74-89-5					
sec-Hexyl acetate	858	2	NI	2	NI	3	NI	0	0	0	1	(2)			FED	2
Methylamyl acetate	456		RTECS No		SA7525000				CAS No		108-84-9					
Methyl amyl alcohol	958	1	NI	1	R	1	NI	1	0	2	1	3			FED	3
Methylamyl alcohol	457		RTECS No		SA7350000				CAS No		108-11-2					
Methyl amyl ketone	959	1	NI	1	NI	1	NI	1	0	0	1	1			FED	2
Methyl amyl ketone	442		RTECS No		MJ5075000				CAS No		110-43-0					
N-Methyl aniline	961	1	NI	1	(NR)	3	1	1	1	(2)	(1)	1			FD	2
N-Methylaniline	3107		RTECS No		BY4550000				CAS No		100-61-8					
Methyl butenol	967	0	NI	0	R	2	NI	1	0	(2)	2	2			D	2
Methylbutenol	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
Methyl tert-butyl ether	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		FED	3
Methyl butyl ketone	443		RTECS No		MP1400000				CAS No		591-78-6					
Methylbutynol	968	0	NI	0	NR	1	NI	1	1	3	0	2			D	2
Methylbutynol	459		RTECS No		ES0810000				CAS No		115-19-5					
Methyl butyrate	973	1	NI	1	NI	(2)	NI	0	0	2	2	(2)			ED	2
Methyl butyrate	444		RTECS No		ET5500000				CAS No		623-42-7					
Methyl cyclohexane	976	3	3	3	NR	3	1	0	0	1	1	1	A		E	2
Methylcyclohexane	460		RTECS No		GV6125000				CAS No		108-87-2					
Methyl cyclopentadiene, dimer	977	4	NI	4	(NR)	(3)	NI	0	(0)	(2)	(2)	(2)			F	2
Methylcyclopentadiene dimer	461		RTECS No		PC1075000				CAS No		26472-00-4					
Methyl cyclopentadienyl manganese tricarbonyl (60-70%) in mineral oil	2213	3	NI	3	NR	4	NI	2	3	4	1	1			S	3
Methylcyclopentadienyl manganese tricarbonyl	2692		RTECS No						CAS No							
N-Methyldiethanolamine	1491	0	NI	0	R	2	NI	1	0	(2)	1	2			D	2

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Methyl diethanolamine	445		RTECS No		KL7525000				CAS No		105-59-9					
Methylene dithiocyanate	2235	2	NI	2	NR	5	NI	2	0	4	NI	NI	S		NI	3
Methylene bisthiocyanate	2693		RTECS No						CAS No							
2-Methyl-6-ethylaniline	984	2	NI	2	NR	2	NI	1	1	(2)	0	2			FD	2
2-Methyl-6-ethyl aniline	54		RTECS No		BY5600000				CAS No		24549-06-2					
2-Butanone	385	0	NI	0	R	1	0	0	0	1	2	2			DE	2
Methyl ethyl ketone	446		RTECS No		EL6475000				CAS No		78-93-3					
2-Methyl-5-ethylpyridine	986	2	NI	2	NI	2	NI	1	2	(3)	3	3			FD	3
2-Methyl-5-ethyl pyridine	53		RTECS No		TJ6825000				CAS No		104-90-5					
Methyl formate	987	0	NI	0	R	1	NI	1	0	2	0	2			DE	2
Methyl formate	447		RTECS No		LQ8925000				CAS No		107-31-3					
N-Methylglucamine, 60% aqueous solution	2048	0	NI	0	R	0	NI	1	0	(3)	0	3			D	3
N-Methylglucamine solution (70% or less)	482		RTECS No		000000000				CAS No		6284-40-8					
2-Methylglutaronitrile with 2-Ethylsuccinonitrile (12% or less)	2397	0	NI	0	R	0	NI	2	2	3	0	1			FD	2
2-Methylglutaronitrile and 2-Ethylsuccinonitrile	3632		RTECS No						CAS No		4553-62-2					
Methyl heptyl ketone	988	3	NI	3	R	3	NI	0	0	NI	NI	NI			FED	NI
Methyl heptyl ketone	448		RTECS No		RA8225000				CAS No		821-55-6					
Methylbutynol	968	0	NI	0	NR	1	NI	1	1	3	0	2			D	2
2-Methyl-2-hydroxy-3-butyne	52		RTECS No		ES0810000				CAS No		115-19-5					
Methyl isobutyl ketone	971	1	NI	1	R	1	0	1	0	2	2	3			FED	3
Methyl isobutyl ketone	449		RTECS No		SA9275000				CAS No		108-10-1					
Methyl methacrylate	995	1	NI	1	R	2	NI	0	0	0	2	2	S		ED	2
Methyl methacrylate	450		RTECS No		OZ5075000				CAS No		80-62-6					
3-Methyl-3-methoxy butanol	996	1	NI	1	NR	0	NI	0	(0)	(2)	1	(2)			FD	2
3-Methyl-3-methoxybutanol	59		RTECS No						CAS No							
3-Methyl-3-methoxybutyl acetate	997	1	NI	1	NR	0	NI	0	(0)	NI	NI	NI			F	NI
3-Methyl-3-methoxybutyl acetate	60		RTECS No						CAS No							
Methyl naphthalenes	1999	4	NI	4	(NR)	(4)	NI	1	0	(2)	1	1		T	F	2
Methyl naphthalene (molten)	451		RTECS No						CAS No							
2-Methyl pentane	1000	3	NI	3	NI	4	NI	(0)	(0)	(2)	(2)	(2)			E	2

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2-Methylpentane	2684		RTECS No		SA2995000				CAS No		107-83-5					
2-Methyl-1,3-propanediol	2200	0	0	0	NR	0	0	0	0	(0)	0	0			D	0
2-Methyl-1,3-propanediol	2213		RTECS No						CAS No							
Methyl propyl ketone	1003	0	NI	0	R	0	NI	1	0	(2)	1	2			FED	2
Methyl propyl ketone	452		RTECS No		SA7875000				CAS No		107-87-9					
2-Methyl pyridine	1005	1	NI	1	R	1	NI	1	2	1	3A	3			D	3
2-Methylpyridine	55		RTECS No		TJ4900000				CAS No		109-06-8					
3-Methylpyridine	1006	1	NI	1	R	1	NI	1	2	2	3	3			D	3
3-Methylpyridine	61		RTECS No		TJ5000000				CAS No		108-99-6					
4-Methylpyridine	1007	1	NI	1	R	1	NI	1	2	2	3	3			D	3
4-Methylpyridine	63		RTECS No		UT5425000				CAS No		108-89-4					
N-Methylpyrrolidone	1008	0	NI	0	R	1	NI	0	0	2	1	2	R		D	3
N-Methyl-2-pyrrolidone	481		RTECS No		UY5790000				CAS No		872-50-4					
Methyl salicylate	86	2	NI	2	R	2	NI	1	1	(2)	2	1	R		SD	3
Methyl salicylate	453		RTECS No		VO4725000				CAS No		119-36-8					
alpha-Methylstyrene	1010	3	3	3	NR	3	NI	0	0	1	2	1	M	(T)	FE	3
alpha-Methylstyrene	107		RTECS No		WL5075300				CAS No		98-83-9					
3-(Methylthio) propionaldehyde	993	0	NI	0	R	3	1	1	1	2	2	3	NS	T	D	3
3-(methylthio)propionaldehyde	2368		RTECS No		UE2285000				CAS No		3268-49-3					
Silica slurry	1514	Inorg	0	0	Inorg	0	0	(0)	(0)	NI	(0)	(0)			S	0
Microsilica slurry	2507		RTECS No						CAS No		7631-86-9					
Molasses	1013	0	NI	0	R	0	NI	0	0	0	0	0			D	0
Molasses	462		RTECS No						CAS No							
Molybdenum polysulfide long chain alkyl dithiocarbamide complex	2344	4	2	2	NR	2	0	0	0	(2)	2	2			Fp	2
Molybdenum polysulfide long chain alkyl dithiocarbamide complex	3108		RTECS No						CAS No							
Morpholine	1018	0	0	0	R	2	NI	1	2	2	3	3			D	3
Morpholine	463		RTECS No		QD6475000				CAS No		110-91-8					
Tetraethyl lead	1303	4	5	5	NR	5	NI	3	2	4	2	2	NR		S	3
Motor fuel anti-knock compound (containing lead alkyls)	464		RTECS No		TP4550000				CAS No		78-00-2					
Myrcene	1019	4	NI	4	R	4	1	0	0	(2)	2	NI			F	2

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Myrcene	465		RTECS No		RG5365000				CAS No		123-35-3					
[Nalco 5740S Antifoam]	2291	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI			NI	NI
[Nalco 5740S Antifoam]	492		RTECS No						CAS No							
Naphthalene	1	3	3	3	NR	4	1	1	0	(2)	1	1	C	T	S	3
Naphthalene (molten)	493		RTECS No		QJ0525000				CAS No		91-20-3					
Naphthalene sulphonic acid condensed with formaldehyde, sodium salt, solution	1020	0	1	1	(NR)	1	NI	0	(0)	(1)	0	1			D	1
Naphthalenesulphonic acid-Formaldehyde copolymer, sodium salt solution	494		RTECS No		EC4850000				CAS No		9084-06-4					
Naphthenic acids	1021	NI	NI	NI	NI	3	NI	1	NI	NI	NI	NI		(T)	FD	NI
Naphthenic acids	495		RTECS No		QK8750000				CAS No		1338-24-5					
Neodecanoic acid	1025	4	NI	4	NR	2	NI	0	0	(2)	0	2			Fp	2
Neodecanoic acid	496		RTECS No						CAS No		26896-20-8					
Acid mixtures (nitrating acid)	289	Inorg	NI	0	Inorg	(2)	NI	3	3	4	3C	3			D	3
Nitrating acid (mixture of sulphuric and nitric acids)	497		RTECS No						CAS No							
Nitric acid (90% or less)	1029	Inorg	NI	0	Inorg	2	NI	(3)	(1)	4	3C	3			D	3
Nitric acid (70% and over)	498		RTECS No		QU5775000				CAS No		7697-37-2					
Nitric acid (90% or less)	1029	Inorg	NI	0	Inorg	2	NI	(3)	(1)	4	3C	3			D	3
Nitric acid (less than 70%)	499		RTECS No		QU5775000				CAS No		7697-37-2					
Nitrilotriacetic acid, trisodium salt	1030	0	NI	0	R	1	0	1	(0)	0	1	1	CMR		D	3
Nitrilotriacetic acid, trisodium salt solution	500		RTECS No		MB8400000				CAS No		5094-31-3					
Mononitrobenzene	1017	1	1	1	R	3	(4)	(2)	2	2	1	1	CRT		SD	3
Nitrobenzene	501		RTECS No		DA6475000				CAS No		98-95-3					
Nitroethane	1037	0	NI	0	NR	2	NI	1	0	(2)	(0)	(1)			SD	2
Nitroethane	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			E	2
Nitroethane(80%)/ Nitropropane(20%)	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			FED	2
Nitroethane, 1-Nitropropane (each 15% or more) mixture	2212		RTECS No						CAS No							
2-Nitrophenol	1041	1	2	2	R	3	(2)	0	0	(1)	1	1			S	1
o-Nitrophenol (molten)	536		RTECS No		SM2100000				CAS No		88-75-5					
1-Nitropropane	1044	(0)	(1)	(1)	(NR)	(2)	NI	1	0	2	0	1			FED	2

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1-Nitropropane	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		FED	3
1- or 2-Nitropropane	20		RTECS No						CAS No							
2-Nitropropane	1045	(0)	(1)	(1)	(NR)	(2)	NI	2	0	2	0	0	C		FED	3
2-Nitropropane	2748		RTECS No		TZ5250000				CAS No		79-46-9					
Nitropropane (60%) Nitroethane (40%) (mixture)	1046	0	1	1	NR	2	NI	1	0	2	0	1	C		FED	3
Nitropropane (60%)/Nitroethane (40%) mixture	504		RTECS No						CAS No							
o-Nitrotoluene	1049	2	2	2	NR	2	(1)	1	0	(2)	0	1	CMR		S	3
o-Nitrotoluene	2745		RTECS No		XT3150000				CAS No		88-72-2					
p-Nitrotoluene	1051	2	1	1	NR	3	0	1	0	(2)	0	1	R		S	3
p-Nitrotoluene	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		S	3
o- or p-Nitrotoluenes	532		RTECS No						CAS No							
Nonane	1054	4	NI	4	R	4	NI	0	0	1	0	0	A		FE	2
Nonane (all isomers)	506		RTECS No		RA6115000				CAS No		111-84-2					
Nonanoic acid	1055	3	NI	3	R	2	NI	0	0	(3)	2	3			F	3
Nonanoic acid (all isomers)	507		RTECS No		RA6650000				CAS No		112-05-0					
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)			Fp	2
Non-edible industrial grade palm oil	3127		RTECS No						CAS No							
Nonene (all isomers)	2222	4	NI	4	NI	3	NI	0	0	0	1	1	A		FE	2
Nonene (all isomers)	508		RTECS No						CAS No							
1-Nonene	1060	4	NI	4	NI	3	NI	0	0	0	1	1	A		FE	2
1-Nonene	2680		RTECS No						CAS No		27215-95-8					
Nonyl acetate	1766	4	NI	4	NI	NI	NI	0	0	NI	NI	NI			F	NI
Nonyl acetate	509		RTECS No						CAS No		143-13-5					
Isononanol	1059	3	NI	3	NR	3	1	0	0	(2)	2	2			Fp	2
Nonyl alcohol (all isomers)	510		RTECS No		RH1400000				CAS No		2430-22-0					
Nonyl methacrylate monomer	1061	5	NI	5	R	3	NI	(0)	(0)	(1)	(1)	(1)			F	1
Nonyl methacrylate monomer	511		RTECS No						CAS No		2696-43-7					
Nonyl phenol	1062	5	4	4	NR	5	3	1	0	(3)	3	3			FD	3

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Nonylphenol	512		RTECS No		SM5600000				CAS No		25154-52-3					
Nonyl(C6-C12)phenol poly(4-12)ethoxylate	1063	4	NI	4	NR	3	1	0	0	(2)	2	1			D	2
Nonylphenol poly(4+)ethoxylate	513		RTECS No						CAS No							
Octamethylcyclotetrasiloxane	2398	5	5	5	NR	0	3	0	0	0	0	0			F	1
Octamethylcyclotetrasiloxane	3633		RTECS No						CAS No							
Octane	1072	5	NI	5	(R)	4	NI	(0)	(0)	0	0	0	A		FE	2
Octane (all isomers)	538		RTECS No		RG8400000				CAS No		111-65-9					
Octanoic acid (Caprylic acid)	1074	3	NI	3	R	1	NI	0	0	(3)	3	3			F	3
Octanoic acid (all isomers)	539		RTECS No		RH0175000				CAS No		134-07-2					
1-Octanol	1075	3	NI	3	R	2	0	1	0	(2)	2	2			Fp	2
Octanol (all isomers)	540		RTECS No		RH6550000				CAS No		111-87-5					
1-Octanol	1075	3	NI	3	R	2	0	1	0	(2)	2	2			Fp	2
1-Octanol	2676		RTECS No		RH6550000				CAS No		111-87-5					
Isooctanol	1076	3	NI	3	R	2	0	1	0	(2)	2	(2)			F	2
iso-Octanol	2675		RTECS No		NS7700000				CAS No		26952-21-6					
Octene (all isomers)	1079	4	NI	4	NR	3	NI	0	0	0	2	1	A		FE	2
Octene (all isomers)	541		RTECS No						CAS No							
Octyl acetate	1080	3	NI	3	R	2	NI	0	0	(1)	1	NI			FD	1
n-Octyl acetate	483		RTECS No		AJ1400000				CAS No		112-14-1					
Isooctaldehyde	1071	2	NI	2	NI	3	NI	0	0	(1)	1	1			F	1
Octyl aldehydes	542		RTECS No						CAS No		63885-09-6					
Octyl decyl adipate	1082	0	NI	0	(R)	(0)	(0)	(0)	(0)	(1)	(1)	(1)			Fp	2
Octyl decyl adipate	543		RTECS No						CAS No		110-29-2					
Olefin/Alkyl ester copolymer (molecular weight 2000+) (LOA)	1965	NI	NI	0	NR	0	NI	0	0	(0)	0	0			Fp	2
Olefin-Alkyl ester copolymer (molecular weight 2000+)	546		RTECS No						CAS No							
Olefin mixtures (C5-C7)	2243	3	NI	3	R	3	NI	(0)	(0)	(1)	(2)	(1)			E	2
Olefin mixtures (C5-C7)	545		RTECS No						CAS No							
Olefin mixtures (C5-C15)	2321	(5)	NI	(5)	NR	(4)	NI	(0)	(0)	(2)	(2)	(1)	A		FE	2
Olefin mixtures (C5-C15)	544		RTECS No						CAS No							
Olefin mixture (C7-C9)	2385	5	4	4	NR	4	NI	(0)	0	0	2	1	A		E	2

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Olefin Mixtures (C7-C9) C8 rich, stabilized	3548		RTECS No						CAS No		97593-00-5					
Olefins C13 and above, all isomers	2028	5	NI	5	NR	0	NI	0	0	(0)	0	0			Fp	2
Olefins (C13+, all isomers)	547		RTECS No						CAS No							
alpha-Olefins (C6-C18),mixture	2030	(5)	NI	(5)	NR	(4)	NI	(0)	(0)	(2)	(2)	(1)	A		FE	2
alpha-Olefins (C6-C18) mixtures	108		RTECS No						CAS No							
Oleic acid	1089	0	NI	0	R	0	NI	0	1	(2)	1	1			Fp	2
Oleic acid	548		RTECS No		RG2275000				CAS No		112-80-1					
Sulphuric acid	1280	0	NI	0	Inorg	2	NI	(3)	(3)	4	3C	3	C		D	3
Oleum	549		RTECS No		WS5600000				CAS No		7664-93-9					
Oleylamine	1862	0	NI	0	NR	4	NI	1	(1)	(3)	3B	3			Fp	3
Oleylamine	550		RTECS No						CAS No							
Olive oil	1090	0	NI	0	R	(2)	NI	(0)	(0)	(1)	1	1			Fp	2
Olive oil	2771		RTECS No		RK4300000				CAS No		8001-25-0					
Orange juice	2375	0	0	0	R	0	0	0	0	(0)	0	0			D	0
Orange juice	3151		RTECS No						CAS No							
Orange juice (not concentrated)	2382	0	0	0	R	0	0	0	0	(0)	0	0			D	0
Orange juice (not concentrated)	3425		RTECS No						CAS No							
[Heavy Oxo Fraction]	2266	5	2	(2)	NR	1	NI	0	0	(1)	1	1			FE	2
Oxygenated aliphatic hydrocarbon mixture	2825		RTECS No						CAS No							
Palm acid oil	2307	(0)	NI	(0)	(R)	(0)	NI	0	(0)	(1)	0	1			Fp	2
Palm acid oil	3037		RTECS No						CAS No							
Palm fatty acid distillate	2310	NI	NI	(0)	(R)	(0)	NI	0	(0)	(1)	0	1			Fp	2
Palm fatty acid distillate	3040		RTECS No						CAS No							
Palm nut oil fatty acid	1095	0	NI	0	R	(3)	NI	0	0	(2)	1	2			Fp	2
Palm kernel acid oil	553		RTECS No						CAS No							
Palm kernel fatty acid distillate	2335	(0)	0	0	R	(3)	NI	0	(0)	(2)	1	2			Fp	2
Palm kernel fatty acid distillate	3111		RTECS No						CAS No							
Palm nut oil	1094	0	NI	0	R	1	NI	(0)	(0)	(1)	(0)	(1)			Fp	2
Palm kernel oil	2766		RTECS No						CAS No							
Palm kernel olein (containing less than 5 % free fatty acids)	2308	(0)	NI	(0)	(R)	1	NI	(0)	(0)	(0)	(0)	(0)			Fp	2

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Palm kernel olein	3038		RTECS No						CAS No							
Palm kernel stearin (containing less than 5% free fatty acids)	2309	0	(0)	(0)	(R)	0	NI	(0)	(0)	(0)	(0)	(0)			Fp	2
Palm kernel stearin	3039		RTECS No						CAS No							
Palm Mid Fraction	2363	(0)	NI	(0)	(R)	(0)	NI	0	0	(0)	(0)	(0)			Fp	2
Palm mid-fraction	3126		RTECS No						CAS No							
Palm oil (containing less than 15% free fatty acids)	2249	0	NI	0	R	0	NI	0	(0)	(0)	0	0			Fp	2
Palm oil	2764		RTECS No						CAS No							
Palm oil fatty acid methyl ester	1097	0	NI	0	R	0	NI	0	0	0	0	1			Fp	2
Palm oil fatty acid methyl ester	554		RTECS No						CAS No							
Palm olein	2250	0	NI	0	R	0	NI	0	(0)	(0)	0	0			Fp	2
Palm olein	2765		RTECS No						CAS No							
Palm stearin	2251	0	NI	0	R	0	NI	0	(0)	(0)	0	0			Fp	2
Palm stearin	555		RTECS No						CAS No							
Paraffin wax	1086	0	NI	0	R	0	NI	(0)	(0)	(1)	1	1			Fp	2
Paraffin wax	556		RTECS No		RV0350000				CAS No		8002-74-2					
Paraldehyde	1098	0	0	0	NR	0	NI	1	0	0	1	3			D	3
Paraldehyde	557		RTECS No		YK0525000				CAS No		123-63-7					
Pyridine bases	2131	1	NI	1	R	2	NI	2	1	(3)	3B	3			FED	3
Paraldehyde-ammonia reaction product	1989		RTECS No						CAS No							
Pentachloroethane	1099	3	2	2	NI	3	1	1	(1)	1	(1)	(1)	CT		S	3
Pentachloroethane	558		RTECS No		KI6300000				CAS No		76-01-7					
1,3-Pentadiene	1102	2	NI	2	NR	2	NI	0	0	0	1	(2)			E	2
1,3-Pentadiene	14		RTECS No		RZ2464000				CAS No		504-60-9					
1,3-Pentadiene (greater than 50%), cyclopentene and isomers, mixtures.	2390	NI	NI	(3)	(NR)	(3)	NI	(2)	(1)	(3)	(2)	(2)	CMR		E	3
1,3-Pentadiene concentrate	3560		RTECS No						CAS No							
Pentaethylene hexamine	1103	0	NI	0	NI	4	NI	1	(2)	(3)	3	(3)	S		D	3
Pentaethylenehexamine	560		RTECS No		RZ2680000				CAS No		4067-16-7					
Pentane	1105	3	NI	3	R	3	NI	0	0	0	1	1			E	2
Pentane (all isomers)	561		RTECS No		RZ9450000				CAS No		109-66-0					
Pentanoic acid	1109	1	NI	1	NI	2	NI	1	2	(3)	3	3			FD	3

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Pentanoic acid	562		RTECS No		YV6100000				CAS No		109-52-4					
Pentanoic acid (64%)/2-methyl butyric acid (36%) mixture	2144	(1)	NI	(1)	NI	(2)	NI	(1)	(2)	(3)	3	(3)			FD	3
n-Pentanoic acid (64%)/2-Methyl butyric acid (36%) mixture	2211		RTECS No						CAS No							
Pentene (all isomers)	1992	2	NI	2	NI	(2)	NI	(0)	(0)	(0)	(0)	(1)			E	2
Pentene (all isomers)	563		RTECS No						CAS No							
1-Pentene	1114	2	NI	2	NI	(2)	NI	(0)	(0)	0	(0)	(1)			E	2
1-Pentene	2679		RTECS No						CAS No		109-67-1					
2-Pentene	1115	2	NI	2	NI	2	NI	(0)	(0)	(0)	(0)	(1)			E	2
2-Pentene	2678		RTECS No						CAS No		109-68-2					
Isopentene	1113	2	NI	2	NI	2	NI	(0)	(0)	(0)	(0)	(1)			E	2
iso-Pentene	2677		RTECS No		EM7600000				CAS No		563-45-1					
Amyl propionate	1484	2	NI	2	R	2	NI	0	0	(2)	2	1			F	2
n-Pentyl propionate	484		RTECS No						CAS No		624-54-4					
1,1,2,2-Tetrachloroethylene	1295	3	2	2	NR	(3)	2	0	0	0	2	1	C		S	3
Perchloroethylene	564		RTECS No		KX3850000				CAS No		127-18-4					
Petrolatum	2244	0	NI	0	NR	0	NI	0	0	2	1	1			Fp	2
Petrolatum	565		RTECS No						CAS No							
Phenol	1124	1	2	2	R	3	0	2	2	(3)	3	3		NT	S	3
Phenol	566		RTECS No		SJ3325000				CAS No		108-95-2					
Phenylxylylethane	1135	5	4	4	NR	(2)	NI	1	0	(1)	(0)	0			F	1
1-Phenyl-1-xylyl ethane	23		RTECS No		CZ7300000				CAS No		40766-31-2					
Phosphate esters, alkyl(C12-C14)amine (LOA)	1854	2	NI	2	NR	3	NI	0	(0)	(2)	1	2			FD	2
Phosphate esters, alkyl (C12-C14) amine	1345		RTECS No						CAS No							
Phosphoric acid	1138	0	NI	0	Inorg	1	NI	(3)	(3)	3	3	3			D	3
Phosphoric acid	567		RTECS No		TB6300000				CAS No		7664-38-2					
Phosphorus (elemental yellow)	1139	Inorg	(3)	(3)	Inorg	6	4	0	0	0	2	1			S	2
Phosphorus, yellow or white	568		RTECS No		TH3500000				CAS No		7732-14-0					
Phthalic anhydride (molten)	1146	1	NI	1	R	2	0	1	0	(3)	1	3	S		S	3
Phthalic anhydride (molten)	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	3

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alpha-Pinene	109		RTECS No		DT7000000				CAS No		80-56-8					
beta-Pinene	41	4	NI	4	NI	4	NI	0	0	0	1	(1)	S	NT	F	3
beta-Pinene	141		RTECS No		DT5078500				CAS No		1330-16-1					
Pine oil	1148	4	NI	4	NR	4	NI	0	0	(1)	(1)	(1)	S	(T)	Fp	3
Pine oil	570		RTECS No		TK5100000				CAS No		8002-09-3					
Polyacrylic acid (40% solution)	2302	(2)	NI	(2)	NR	1	NI	0	0	(1)	1	1			D	1
Polyacrylic acid solution (40% or less)	2709		RTECS No						CAS No							
Poly(C18-C22)alkyl acrylate in xylene	1151	(3)	NI	(3)	NR	2	NI	0	0	(2)	2	1			Fp	2
Polyalkyl (C18-C22) acrylate in xylene	580		RTECS No						CAS No							
Polyalkylalkenaminesuccinimide, molybdenum oxysulphide	2379	NI	0	0	NR	0	NI	0	0	(0)	0	0			Fp	2
Polyalkylalkenaminesuccinimide, molybdenum oxysulphide	3422		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			D	2
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether	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			D	2
Poly(2-8)alkylene glycol monoalkyl (C1-C6) ether acetate	575		RTECS No						CAS No							
Poly alkyl methacrylate (C1-C20) (LOA)	1984	(5)	NI	(5)	NR	0	NI	0	0	0	0	0			Fp	2
Polyalkyl (C10-C20) methacrylate	2189		RTECS No						CAS No							
Poly alkyl(C10-C18) methacrylate/ethylene-propylene copolymer mixture	2201	0	0	0	NR	0	0	0	0	(1)	1	1	A		Fp	3
Polyalkyl (C10-C18) methacrylate/ethylene-propylene copolymer mixture	2188		RTECS No						CAS No							
Polyaluminium chloride (sol.)	1136	Inorg	0	0	Inorg	0	NI	(0)	(0)	(1)	(0)	(1)			D	1
Polyaluminium chloride solution	584		RTECS No		BD0549500				CAS No		1327-41-9					
Polybutene	1154	0	NI	0	(NR)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			Fp	2
Polybutene	585		RTECS No		EM9032000				CAS No		9003-29-6					
Polybutenylsuccinimide in oil	2055	5	NI	5	NR	0	NI	(0)	(0)	(0)	0	(0)			Fp	2
Polybutenyl succinimide	586		RTECS No						CAS No							
Poly(2+)cyclic aromatics	2246	4	4	4	NR	(4)	NI	(1)	(1)	(2)	(1)	(1)	CM		S	3
Poly(2+)cyclic aromatics	574		RTECS No						CAS No							
Polyether (molecular weight 2000+) (LOA)	1975	0	NI	0	NR	1	NI	0	(0)	(0)	0	0			Fp	2
Polyether (molecular weight 1350+)	587		RTECS No						CAS No							
Diethylene glycol initiated polyoxypropylene diamine	2353	0	NI	0	NR	2	NI	0	0	(3)	3B	(3)			D	3

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Polyetheramine	2946		RTECS No						CAS No							
Polyether, borated	1863	0	NI	0	NR	3	1	0	(0)	(1)	1	0			D	1
Polyether, borated	572		RTECS No						CAS No							
Polyethylene glycol	1157	0	NI	0	NR	0	NI	0	0	0	1	1			D	1
Polyethylene glycol	589		RTECS No		TQ3500000				CAS No		25322-68-3					
Polyethylene glycol dimethyl ether	1158	0	NI	0	NR	0	NI	0	0	(1)	1	(1)			D	1
Polyethylene glycol dimethyl ether	590		RTECS No		MC9630000				CAS No		24991-55-7					
Polyethylene polyamines	2367	0	NI	0	NR	3	0	1	0	(3)	2	(3)	S		D	0
Polyethylene polyamines	3131		RTECS No						CAS No							
Polyethylene amines / paraffin mixtures	1991	(5)	NI	(5)	NR	3	0	0	(1)	(3)	(2)	(3)	S		Fp	0
Polyethylene polyamines (more than 50% C5 -C20 paraffin oil)	591		RTECS No						CAS No							
Polyferric sulphate solution	338	Inorg	0	0	Inorg	(2)	NI	1	(1)	(3)	3	(3)			D	3
Polyferric sulphate solution	592		RTECS No						CAS No							
Polyglycerine, sodium salt, solution	1874	0	NI	0	R	0	NI	0	0	(3)	(2)	3			D	3
Polyglycerin, sodium salt solution (containing less than 3% sodium hydroxide)	593		RTECS No						CAS No							
Polyglycerol	1511	NI	NI	NI	NI	NI	NI	0	(0)	(0)	(0)	(0)			D	0
Polyglycerol	594		RTECS No						CAS No							
Poly (iminoethylene)-graft-N-poly (ethyleneoxy) solution (90% or less)	2287	0	0	0	NR	0	NI	0	0	(1)	0	1			D	1
Poly(iminoethylene)-graft-N-poly(ethyleneoxy) solution (90% or less)	2537		RTECS No						CAS No							
Polyisobutenamine in aliphatic (C10-C14) solvent	2192	0	0	0	NR	2	NI	0	(0)	(2)	2	1			FED	2
Polyisobutenamine in aliphatic (C10-C14) solvent	2374		RTECS No						CAS No							
Polyisobutenyl anhydride adduct	2127	0	NI	0	NR	0	NI	0	0	(1)	0	1			FD	1
Polyisobutenyl anhydride adduct	2256		RTECS No						CAS No							
Poly(4+)isobutylene	2264	0	NI	0	NR	0	NI	(0)	(0)	(0)	(0)	(0)			Fp	2
Poly(4+)isobutylene	578		RTECS No						CAS No							
Polymethylene polyphenyl isocyanate	1153	NI	(2)	(2)	NR	0	0	0	0	(2)	2	2	S		S	2
Polymethylene polyphenyl isocyanate	595		RTECS No		TR0350000				CAS No		9016-87-9					
Polyolefin (molecular weight 300+) (LOA)	1968	0	NI	0	NR	0	NI	0	0	0	0	0			Fp	2
Polyolefin (molecular weight 300+)	596		RTECS No						CAS No							
Polyolefinamide alkene(C16+)amine (LOA)	2104	5	NI	5	NR	0	NI	0	0	(1)	1	(1)			Fp	2

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Polyolefin amide alkeneamine (C17+)	597		RTECS No						CAS No							
Polyolefin amide alkeneamine (C28+) (LOA)	1971	0	NI	0	NR	0	NI	0	0	(0)	1	(1)			NI	1
Polyolefin amide alkeneamine (C28+)	598		RTECS No						CAS No							
Polyolefin amide alkeneamine borate (C28-C250) (LOA)	1970	0	NI	0	NR	0	NI	0	0	(0)	0	(0)			Fp	2
Polyolefin amide alkeneamine borate (C28-C250)	600		RTECS No						CAS No							
Polyolefin amide alkeneamine/molybden oxysulphide mi	2256	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI			NI	NI
Polyolefin amide alkeneamine/molybdenum oxysulphide mixture	603		RTECS No						CAS No							
Polyolefin amide alkylene amine polyol	1989	0	NI	0	NR	0	NI	0	0	(0)	0	0	S		Fp	3
Polyolefin amide alkeneamine polyol	602		RTECS No						CAS No							
Poly (17+) olefin amine	2049	0	NI	0	NR	2	NI	0	(0)	(1)	(1)	(1)			Fp	2
Poly (17+) olefin amine	571		RTECS No						CAS No				98761-78-5			
Polyolefinamine (C28-C250) (LOA)	2107	0	NI	0	NR	2	NI	0	(0)	(2)	2	(1)			Fp	2
Polyolefinamine (C28-C250)	609		RTECS No						CAS No							
Polyolefinamine (C28-C250) (LOA)	2107	0	NI	0	NR	2	NI	0	(0)	(2)	2	(1)			Fp	2
Polyolefinamine in alkyl (C2-C4) benzenes	610		RTECS No						CAS No							
Polyolefinamine (C28-C250) (LOA)	2107	0	NI	0	NR	2	NI	0	(0)	(2)	2	(1)			Fp	2
Polyolefinamine in aromatic solvent	611		RTECS No						CAS No							
Polyolefin aminoester salt	2095	0	NI	0	NR	1	NI	0	0	(1)	1	(1)			Fp	2
Polyolefin aminoester salts (molecular weight 2000+)	604		RTECS No						CAS No							
Lubrizol polyolefin anhydride	1865	0	NI	0	NR	1	NI	0	0	(2)	1	(2)			Fp	2
Polyolefin anhydride	605		RTECS No						CAS No							
Polyolefin ester (C28-C250) (LOA)	1969	0	NI	0	NR	0	NI	0	0	(0)	0	0			Fp	2
Polyolefin ester (C28-C250)	606		RTECS No						CAS No							
Polyolefin phenolic amine (C28-C250) (LOA)	1980	0	NI	0	NI	0	NI	0	0	(1)	(1)	(1)			Fp	2
Polyolefin phenolic amine (C28-C250)	607		RTECS No						CAS No							
Polyolefin phosphoro sulphide - barium derivative (C28-C250) (LOA)	1976	0	NI	0	NI	2	NI	0	(0)	(0)	(0)	(0)			S	0
Polyolefin phosphorosulphide, barium derivative (C28-C250)	608		RTECS No						CAS No							
Poly(ethylene glycol) methylbutenyl ether (MW >1000)	2395	NI	0	0	R	1	NI	0	0	(0)	0	0			D	0
Poly(oxyalkylene)alkenyl ether (MW>1,000)	3501		RTECS No						CAS No							
Polyoxyethylene sorbitan monooleate	1442	3	NI	3	NI	(3)	NI	0	(0)	(1)	0	1			D	1

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Poly(20)oxyethylene sorbitan monooleate	577		RTECS No		WG2932500				CAS No		9005-65-6					
[Jeffamine D-230] / Polyoxypropylene diamine	2352	1	NI	1	NR	1	NI	0	0	(3)	3	3			D	3
Polyoxypropylene diamine	3112		RTECS No						CAS No							
Polypropylene	1512	0	NI	0	NR	(0)	NI	(0)	(0)	(0)	(0)	(0)			F	1
Poly(5+)propylene	579		RTECS No		UD1842000				CAS No		9003-07-0					
Polypropylene glycol	1159	0	NI	0	(NR)	1	NI	1	0	(1)	1	1			D	1
Polypropylene glycol	612		RTECS No		TR6125000				CAS No		25322-69-4					
Polysiloxane	1161	NI	4	4	NI	2	NI	0	(0)	(0)	0	0			F	1
Polysiloxane	613		RTECS No						CAS No							
Poly (tetramethylene) ether glycol (mw 600-3000)	2147	2	NI	2	NR	3	NI	0	0	(0)	0	(0)			FD	0
Poly(tetramethylene ether) glycol (mw 600-3000)	2540		RTECS No						CAS No							
Potassium chloride solution	1513	0	0	0	Inorg	1	0	0	(0)	(0)	0	0			D	0
Potassium chloride solution	614		RTECS No		TS8050000				CAS No		7447-40-7					
Potassium chloride brine (less than 26%)	2345	0	0	0	Inorg	0	0	0	(0)	(0)	0	0			D	0
Potassium chloride solution (less than 26%)	3109		RTECS No						CAS No							
Potassium formate solution (75% or more)	2121	0	NI	0	R	0	NI	(0)	(0)	(2)	2	2			D	2
Potassium formate solutions	615		RTECS No		LQ9625000				CAS No		590-29-4					
Potassium hydroxide (sol.)	1171	Inorg	0	0	Inorg	2	NI	2	(2)	(3)	3C	3			D	3
Potassium hydroxide solution	616		RTECS No		TT2100000				CAS No		1310-58-3					
Potassium oleate	1497	3	NI	3	R	4	NI	(0)	(0)	(1)	1	1			FD	1
Potassium oleate	617		RTECS No		RK1150000				CAS No		143-18-0					
Polyolefin acid, potassium salt	1895	NI	NI	NI	NR	0	NI	0	0	(0)	0	0			NI	0
Potassium salt of polyolefin acid	2199		RTECS No						CAS No							
Potassium thiosulphate solution (50% or less)	2152	Inorg	0	0	Inorg	2	NI	0	0	(2)	2	(2)			D	2
Potassium thiosulphate (50% or less)	2335		RTECS No						CAS No							
Propanolamine	1183	0	NI	0	R	2	NI	0	1	(3)	3	3			D	3
n-Propanolamine	485		RTECS No		UA5600000				CAS No		156-87-6					
beta-Propiolactone	1184	0	NI	0	R	(2)	NI	2	(2)	4	3B	3	CM		D	3
beta-Propiolactone	142		RTECS No		RQ7350000				CAS No		57-57-8					
Propionaldehyde	1185	0	NI	0	R	2	NI	1	0	1	2	2			DE	2

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Propionaldehyde	619		RTECS No		UE0350000				CAS No		123-38-6					
Propionic acid	1186	0	NI	0	R	2	NI	0	0	(3)	3B	3			D	3
Propionic acid	620		RTECS No		UE5950000				CAS No		79-09-4					
Propionic anhydride	1187	0	NI	0	R	2	NI	0	0	(3)	2	3			FD	3
Propionic anhydride	621		RTECS No		UF9100000				CAS No		123-62-6					
Propionitrile	1188	0	NI	0	NI	0	NI	3	3	4	1	2	R		D	3
Propionitrile	622		RTECS No		UF9625000				CAS No		107-12-0					
Propyl acetate	1191	1	NI	1	R	2	NI	0	0	0	1	1			ED	1
n-Propyl acetate	487		RTECS No		AJ3675000				CAS No		109-60-4					
Propanol	1180	0	NI	0	R	0	NI	1	0	0	1	2	R		D	3
n-Propyl alcohol	488		RTECS No		UH8225000				CAS No		71-23-8					
Propylamine	1194	0	NI	0	NI	1	NI	2	2	3	3	3			DE	3
n-Propylamine	490		RTECS No		UH9100000				CAS No		107-10-8					
Propyl benzene	1196	NI	NI	NI	NI	3	NI	NI	NI	NI	NI	NI		(T)	FE	NI
Propylbenzene	2686		RTECS No		DA8750000				CAS No		103-65-1					
Isopropyl benzene	1197	3	2	2	R	3	NI	0	0	0	2	1			FE	2
Propylbenzene (all isomers)	623		RTECS No		GR8575000				CAS No		98-82-8					
Propyl chloride	1198	2	NI	2	NI	1	NI	0	NI	NI	NI	NI			FED	2
n-Propyl chloride	489		RTECS No		TX4400000				CAS No		540-54-5					
Ethylene-propylene copolymer	1508	NI	NI	NI	NI	NI	NI	(0)	(0)	(0)	(0)	(0)			NI	0
Propylene-Butylene copolymer	633		RTECS No						CAS No							
Propylene carbonate	2056	0	NI	0	R	0	NI	0	0	(3)	2	3			D	3
Propylene carbonate	624		RTECS No		FF9650000				CAS No		108-32-7					
Propylene dimer	1201	3	NI	3	R	3	NI	NI	NI	NI	NI	NI			E	2
Propylene dimer	625		RTECS No						CAS No							
1,2-Propylene glycol	1202	0	NI	0	R	0	0	0	0	(1)	0	1			D	1
Propylene glycol	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			D	1
Propylene glycol methyl ether acetate	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			D	3

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Propylene glycol monoalkyl ether	628		RTECS No						CAS No							
Propylene glycol phenyl ether	2057	1	NI	1	NI	1	NI	0	0	(1)	(1)	(1)			SD	1
Propylene glycol phenyl ether	629		RTECS No		UB8886000				CAS No		4169-04-4					
Propylene oxide	76	0	NI	0	R	2	NI	1	1	2	2	3	CMR		DE	3
Propylene oxide	630		RTECS No		TZ2975000				CAS No		75-56-9					
Propylene tetramer	2255	NI	4	4	NR	(4)	NI	(0)	(0)	(1)	(1)	(1)			F	1
Propylene tetramer	631		RTECS No						CAS No							
Propylene trimer	1207	5	4	4	NR	3	2	(0)	(0)	(1)	(1)	(1)			FE	2
Propylene trimer	632		RTECS No		UD2794000				CAS No		13987-01-4					
Pyridine	1213	0	NI	0	R	3	0	1	1	2	1	3		NT	D	3
Pyridine	634		RTECS No		UR8400000				CAS No		110-86-1					
Pyrolysis gasoline	2271	(4)	(3)	(3)	(R)	(3)	(1)	1	0	(2)	2	2	TCM		FE	3
Pyrolysis gasoline (containing benzene)	1990		RTECS No						CAS No							
Rapeseed oil (high erucic acid; containing less than 4% free fatty acids)	2315	0	NI	0	R	(2)	NI	(0)	(0)	(0)	(1)	(1)			Fp	2
Rapeseed oil	3045		RTECS No						CAS No							
Rapeseed oil (Low erucic acid containing less than 4% free fatty acids)	2296	0	NI	0	R	(2)	NI	0	0	0	(1)	(1)			Fp	2
Rapeseed oil (low erucic acid containing less than 4% free fatty acids)	2956		RTECS No						CAS No							
Rape seed oil fatty acid, methyl ester	2209	0	0	0	R	0	NI	0	(0)	(1)	1	1			Fp	2
Rape seed oil fatty acid methyl esters	2576		RTECS No						CAS No							
Distilled Resin Oil, DRO	2299	(3)	NI	(3)	(NR)	(3)	NI	0	0	(2)	2	1	MN		FE	3
Resin oil, distilled	2958		RTECS No						CAS No							
Rice bran oil (containing less than 15% of free fatty acids)	2312	(0)	NI	(0)	(R)	(0)	NI	0	(0)	(1)	0	1			Fp	2
Rice bran oil	3043		RTECS No						CAS No							
Rosin	1219	3	NI	3	NR	3	NI	0	0	2	(1)	1	S		S	2
Rosin	635		RTECS No						CAS No		8050-09-7					
Rosin soap (disproportionated solution)	1220	3	NI	3	NR	3	NI	0	NI	NI	NI	NI			S	NI
Rosin soap (disproportionated) solution	636		RTECS No						CAS No							
Safflower oil (containing less than 5% free fatty acids)	1222	(0)	NI	(0)	(R)	(0)	NI	(0)	(0)	(1)	1	1			Fp	2
Safflower oil	3041		RTECS No		VN2230000				CAS No		8001-23-8					
Shale oil	2401	(5)	NI	(5)	NR	3	0	0	0	(2)	2	2	CS		Fp	3

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Shale oil	3636		RTECS No						CAS No							
Shea butter (containing less than 15% free fatty acids)	2311	(0)	NI	(0)	NR	(0)	NI	(0)	(0)	(1)	(0)	(1)			Fp	2
Shea butter	3042		RTECS No						CAS No							
Sodium acetate	1498	0	NI	0	R	0	NI	0	0	0	1	1			D	1
Sodium acetate solutions	639		RTECS No			AJ4375000			CAS No			127-09-3				
Alkane (C14-C17) sulphonic acid, sodium salt	334	2	2	2	R	3	1	0	0	(2)	2	2			D	2
Sodium alkyl (C14-C17) sulphonates (60-65% solution)	1153		RTECS No						CAS No							
Sodium aluminate (solution)	1234	Inorg	0	0	Inorg	NI	NI	(0)	(0)	(3)	(3)	(3)			D	3
Sodium aluminate solution	641		RTECS No			BD1600000			CAS No			11138-49-1				
Sodium aluminosilicate slurry	1235	Inorg	0	0	Inorg	1	0	0	0	0	1	1			S	1
Sodium aluminosilicate slurry	643		RTECS No						CAS No			1344-00-9				
Sodium benzoate	1475	0	NI	0	R	1	NI	0	(0)	(1)	0	1			D	1
Sodium benzoate	644		RTECS No			DH6650000			CAS No			532-32-1				
Sodium bicarbonate solution (less than 10%)	2386	0	NI	0	Inorg	0	0	0	0	(0)	0	0			D	0
Sodium bicarbonate solution (less than 10%)	3558		RTECS No						CAS No			144-55-8				
Sodium borohydride/sodium hydroxide mixture (soln.)	1239	Inorg	0	0	Inorg	2	NI	(2)	(1)	(3)	(3)	(3)			D	3
Sodium borohydride (15% or less)/Sodium hydroxide solution	645		RTECS No						CAS No							
Sodium bromide solution (less than 50%)	2387	0	NI	0	Inorg	0	0	0	0	(1)	0	1	R		D	3
Sodium bromide solution (less than 50%)	3410		RTECS No			VZ 315000			CAS No			7647-15-6				
Sodium carbonate	1243	Inorg	0	0	Inorg	1	NI	0	0	3	1	2			SD	2
Sodium carbonate solution	646		RTECS No			VZ4050000			CAS No			497-19-8				
Sodium chlorate solid and solutions (50% or less)	1244	Inorg	0	0	Inorg	1	NI	1	0	(2)	1	1	S		D	2
Sodium chlorate solution (50% or less)	647		RTECS No			FO0525000			CAS No			7775-09-9				
Sodium dichromate solution	487	Inorg	0	0	Inorg	4	1	2	2	4	2	3	CMS		D	3
Sodium dichromate solution (70% or less)	649		RTECS No			HX7700000			CAS No			10588-01-9				
Sodium hydrogen sulphide (6% or less)/sodium carbonate (3% or less)	2262	0	NI	0	Inorg	1	NI	(0)	(0)	(1)	(1)	(1)			D	1
Sodium hydrogen sulphide (6% or less)/Sodium carbonate (3% or less) solution	650		RTECS No						CAS No							
Sodium hydrogen sulphite,solutions	1251	Inorg	0	0	Inorg	1	NI	0	(0)	(0)	0	0			D	0
Sodium hydrogen sulphite solution (45% or less)	651		RTECS No			VZ2000000			CAS No			7631-90-5				
Sodium hydrogen sulphide/Ammonium sulphide(mixture)	1253	Inorg	0	0	Inorg	3	NI	1	1	0	2	2			D	2

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Sodium hydrosulphide/Ammonium sulphide solution	653			RTECS No					CAS No							
Sodium hydrogen sulphide,solutions	1252	Inorg	0	0	Inorg	1	NI	1	1	1	2	2			D	2
Sodium hydrosulphide solution (45% or less)	652			RTECS No	WE1900000				CAS No		16721-80-5					
Sodium hydroxide	1254	Inorg	0	0	Inorg	2	NI	1	1	(3)	3C	3			D	3
Sodium hydroxide solution	654			RTECS No	WB4900000				CAS No		1310-73-2					
Sodium hypochlorite solutions containing 20% and less but more than 2% NaOCl	1256	Inorg	0	0	Inorg	(4)	(1)	0	0	1	3	3	S		D	3
Sodium hypochlorite solution (15% or less)	2785			RTECS No	NH3486300				CAS No		7681-52-9					
Sodium hypochlorite solutions containing more than 20% NaOCl	1255	Inorg	0	0	Inorg	5	2	0	0	1	3	3	S		D	3
Sodium hypochlorite solution (Full strength solution)	655			RTECS No	NH3486300				CAS No		7681-52-9					
Sodium nitrate	1259	Inorg	0	0	Inorg	0	NI	(0)	(0)	(0)	(1)	(1)			SD	1
Sodium nitrate	656			RTECS No	WC5600000				CAS No		7631-99-4					
Sodium nitrite	340	Inorg	0	0	Inorg	3	0	2	(2)	2	0	1			SD	2
Sodium nitrite solution	658			RTECS No	RA1225000				CAS No		7632-00-0					
Sodium perborate monohydrate	2284	Inorg	NI	NI	Inorg	3	NI	1	0	(3)	2	3			NI	3
Sodium perborate monohydrate	2948			RTECS No					CAS No							
Sodium petroleum sulphonate	1860	0	NI	0	(NR)	2	NI	0	(0)	(2)	1	2	S		S	2
Sodium petroleum sulphonate	660			RTECS No					CAS No							
Sodium polyacrylate solution	1487	0	NI	0	NR	1	0	0	(0)	(1)	1	1			D	1
Sodium poly(4+)acrylate solutions	826			RTECS No					CAS No							
Sodium silicate (solution)	1262	Inorg	0	0	Inorg	2	NI	1	0	(3)	3	3			D	3
Sodium silicate solution	661			RTECS No					CAS No		1344-09-8					
Sodium sulphate (solution)	1499	Inorg	0	0	Inorg	0	0	0	(0)	(1)	1	1			SD	1
Sodium sulphate solutions	662			RTECS No	WE1650000				CAS No		7757-82-6					
Sodium sulphide (solution)	1263	Inorg	0	0	Inorg	3	NI	1	1	(3)	3A	3			D	3
Sodium sulphide solution (15% or less)	663			RTECS No	WE1905000				CAS No		1313-82-2					
Sodium sulphite (solution)	9	Inorg	0	0	Inorg	2	NI	0	(0)	(1)	0	1			D	1
Sodium sulphite solution (25% or less)	664			RTECS No	WE2150000				CAS No		7757-83-7					
Sodium tartrate succinate/Sodium tartrate disuccinate mixtures	1771	NI	1	1	NI	1	NI	0	NI	NI	NI	NI			D	NI
Sodium tartrates/Sodium succinates solution	665			RTECS No					CAS No							
Sodium thiocyanate	1264	Inorg	0	0	Inorg	2	NI	1	(0)	(1)	0	0			D	1

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Sodium thiocyanate solution (56% or less)	667		RTECS No		XL2275000				CAS No		540-72-7					
Sorbitan monooleate	2215	(5)	NI	(5)	R	3	NI	0	NI	NI	0	0			Fp	2
Sorbitan monooleate	2408		RTECS No						CAS No							
Sorbitol	1265	0	NI	0	R	0	NI	0	(0)	(0)	(0)	(0)			D	0
Sorbitol solution	668		RTECS No		LZ4290000				CAS No		50-70-4					
Soyabean oil (containing less than 4% free fatty acids)	2320	0	NI	0	R	0	NI	0	(0)	(1)	(0)	1			Fp	2
Soyabean oil	3050		RTECS No						CAS No							
Yeast Extract Solution with Propylene Glycol (25% or less)	2396	NI	0	0	R	0	NI	0	0	(1)	0	1			D	1
Stabilized Yeast Extract Solution	3631		RTECS No						CAS No		8013-01-2					
Styrene (monomer)	1273	3	(2)	3	R	3	NI	1	0	2	2	2	CM		FE	3
Styrene monomer	669		RTECS No		WL3675000				CAS No		100-42-5					
Sulpho hydrocarbon (C3-C88) (LOA)	1972	4	NI	4	NR	2	NI	0	0	0	0	0			Fp	2
Sulphohydrocarbon (C3-C88)	672		RTECS No						CAS No							
Sulpholane	1277	0	1	1	NR	2	0	1	0	0	1	2			SD	2
Sulpholane	673		RTECS No		XN0700000				CAS No		126-33-0					
Sulphonated polyacrylate solution	1760	NI	0	0	NI	0	NI	(0)	(0)	(0)	(0)	(0)			D	0
Sulphonated polyacrylate solution	674		RTECS No						CAS No							
Sulphur	906	Inorg	0	0	Inorg	0	NI	0	0	(1)	1	1			S	1
Sulphur (molten)	675		RTECS No		WS4250000				CAS No		7704-34-9					
Sulphuric acid	1280	0	NI	0	Inorg	2	NI	(3)	(3)	4	3C	3	C		D	3
Sulphuric acid	676		RTECS No		WS5600000				CAS No		7664-93-9					
Sulphuric acid	1280	0	NI	0	Inorg	2	NI	(3)	(3)	4	3C	3	C		D	3
Sulphuric acid, spent	677		RTECS No		WS5600000				CAS No		7664-93-9					
Sulfurized fat(C14-C20) (LOA)	1853	0	NI	0	NR	1	NI	0	(0)	(1)	0	(1)			FD	1
Sulphurized fat (C14-C20)	2257		RTECS No						CAS No							
Sulfurized polyolefinamide alkene(C28-C250)amine (LOA)	1855	0	NI	0	NR	0	NI	0	0	(0)	0	0			FD	0
Sulphurized polyolefinamide alkene (C28-C250) amine	2258		RTECS No						CAS No							
Sunflower oil	1283	0	NI	0	R	0	NI	(0)	(0)	(1)	(0)	(1)			Fp	2
Sunflower seed oil	2782		RTECS No						CAS No		8001-21-6					
Tall oil, crude and distilled	1285	(4)	NI	(4)	(R)	(2)	NI	0	0	(0)	0	0	S		Fp	2

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Tall oil (crude and distilled)	678		RTECS No						CAS No		68187-71-3					
Crude Tall Oil	2357	4	NI	4	R	2	0	0	0	(0)	0	0	S		Fp	2
Tall oil, crude	3118		RTECS No						CAS No							
Tall oil, distilled	2283	0	NI	0	R	0	NI	0	(0)	(0)	0	(0)			Fp	2
Tall oil, distilled	2890		RTECS No						CAS No							
Tall oil fatty acid (resin acids less than 2%)	1287	0	0	0	R	0	0	0	0	(1)	1	0			Fp	2
Tall oil fatty acid (resin acids less than 20%)	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			S	2
Tall oil fatty acid, barium salt	680		RTECS No						CAS No							
Tall oil pitch	2323	3	NI	3	NR	0	0	0	0	(0)	0	(0)			Fp	2
Tall oil pitch	3051		RTECS No						CAS No							
Tall oil soap (disproportionated solution)	1286	NI	NI	NI	NI	NI	NI	(1)	(0)	(2)	1	2			D	2
Tall oil soap (disproportionated) solution	681		RTECS No						CAS No							
Tallow	1288	0	NI	0	R	0	NI	0	0	(0)	(0)	(0)			Fp	2
Tallow	682		RTECS No						CAS No		61789-21-6					
Tallow fatty acid	1289	0	NI	0	R	0	NI	0	(0)	(0)	(0)	(0)			Fp	2
Tallow fatty acid	684		RTECS No						CAS No							
1,1,2,2-Tetrachloroethane	53	2	2	2	NR	3	0	2	0	2	2	2			SD	2
Tetrachloroethane	687		RTECS No		KI8575000				CAS No		79-34-5					
Tetradecanoic acid (Myristic acid)	1298	5	NI	0	R	0	NI	0	(0)	(1)	(1)	(1)			Fp	2
n-Tetradecanoic acid	491		RTECS No		QH4375000				CAS No		544-63-8					
Tetraethylene glycol	1301	0	NI	0	NR	0	NI	0	0	0	1	1			D	1
Tetraethylene glycol	688		RTECS No		XC2100000				CAS No		112-60-7					
Tetraethylene pentamine	1302	0	NI	0	NR	3	NI	0	2	(3)	3	3	S		D	3
Tetraethylene pentamine	689		RTECS No		KH8585000				CAS No		112-57-2					
Alcoholic silicasol	2198	0	0	0	R	0	0	0	0	0	1	2			DE	2
Tetraethyl silicate monomer/oligomer (20% in ethanol)	2475		RTECS No						CAS No							
Tetrahydrofuran	1304	0	NI	0	R	0	NI	0	(0)	0	1	2			DE	2
Tetrahydrofuran	690		RTECS No		LU5950000				CAS No		109-99-9					
Tetrahydronaphthalene	1305	3	3	3	NR	3	NI	0	0	(2)	2	0			F	2

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Tetrahydronaphthalene	691		RTECS No		QK3850000				CAS No		119-64-2					
1,2,3,4-Tetramethylbenzene	1307	4	NI	4	NI	4	NI	0	(0)	(1)	1	(1)			F	1
Tetramethylbenzene (all isomers)	692		RTECS No		DC0465000				CAS No		488-23-3					
Tetrapotassium pyrophosphate	2400	Inorg	0	0	Inorg-R	1	NI	0	NI	NI	NI	NI			D	NI
Tetrapotassium pyrophosphate	3635		RTECS No						CAS No		7320-34-5					
Thixatrol plus	2210	5	NI	5	R	3	NI	0	0	0	1	1			S	1
Thixatrol Plus	2699		RTECS No						CAS No							
Titanium dioxide (64 - 77% solution in water)	2080	Inorg	1	1	Inorg	1	NI	0	0	0	1	1			NI	1
Titanium dioxide slurry	2259		RTECS No						CAS No		13463-67-7					
Toluene	330	2	2	2	R	3	0	0	0	0	2	2	ANR	NT	E	3
Toluene	693		RTECS No		XS5250000				CAS No		108-88-3					
2,4-Tolylenediamine	1317	0	2	2	NR	3	0	2	2	4	1	2	CMS		Fp	3
Toluenediamine	695		RTECS No		XS9625000				CAS No		96-80-7					
Toluene diisocyanate	1315	(3)	1	1	NR	2	NI	0	(0)	4	3	3	SCL		S	3
Toluene diisocyanate	694		RTECS No		CZ6300000				CAS No		584-84-9					
Toluidines	1316	1	1	1	R	4	2	1	0	(2)	2	2	CM		FD	3
o-Toluidine	537		RTECS No						CAS No							
Tolyl triazole	2292	1	NI	1	NR	2	0	1	0	(2)	(1)	2			S	2
Tolyl triazole	696		RTECS No						CAS No							
Tributyl phosphate	1319	4	2	2	R	3	0	1	0	2	2	2	S		F	3
Tributyl phosphate	697		RTECS No		TC7700000				CAS No		126-73-8					
1,2,3-Trichlorobenzene	2191	4	4	4	NR	4	2	1	0	(2)	2	2			S	2
1,2,3-Trichlorobenzene (molten)	2288		RTECS No						CAS No							
1,2,4-Trichlorobenzene	1323	4	5	5	NR	4	1	1	0	(2)	2	2	M		S	3
1,2,4-Trichlorobenzene	7		RTECS No		DC2100000				CAS No		120-82-1					
1,1,1-Trichloroethane	1326	2	NI	2	NR	2	NI	0	0	0	2	2			SD	2
1,1,1-Trichloroethane	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			SD	2
1,1,2-Trichloroethane	3		RTECS No		KJ3150000				CAS No		70-00-5					
1,1,2-Trichloro-ethylene	329	2	2	2	NR	3	NI	0	0	0	2	2	MC		SD	3

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Trichloroethylene	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		SD	3
1,2,3-Trichloropropane	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			S	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	2		RTECS No		KJ4000000				CAS No		76-13-1					
Tricresyl phosphate (more than 1% ortho-isomers)	1332	5	3	3	R	4	4	0	1	0	1	1	N		S	2
Tricresyl phosphate (containing 1% or more ortho-isomer)	699		RTECS No		TD0175000				CAS No		1330-78-5					
Tricresyl phosphate (less than 1% ortho-isomers)	1331	5	(3)	(3)	(R)	(4)	(4)	0	1	0	1	1	N		S	2
Tricresyl phosphate (containing less than 1% ortho-isomer)	700		RTECS No		TD0175000				CAS No		1330-78-5					
Tridecane	1333	0	NI	0	NI	0	NI	0	0	(1)	1	0			Fp	2
Tridecane	701		RTECS No		YD3025000				CAS No		629-50-5					
Tridecanoic acid	1334	5	NI	5	(R)	3	NI	(0)	(0)	(1)	(1)	(1)			Fp	2
Tridecanoic acid	702		RTECS No		YD3850000				CAS No		638-53-9					
Tridecyl acetate	1768	5	NI	5	NI	0	NI	0	(0)	(2)	2	2			F	2
Tridecyl acetate	703		RTECS No						CAS No		1072-33-9					
Triethanolamine	1338	0	0	0	R	1	NI	0	0	(2)	1	2			D	2
Triethanolamine	704		RTECS No		KL9275000				CAS No		102-71-6					
Triethylamine	1339	1	0	0	R	3	0	1	2	2	2	3			D	3
Triethylamine	706		RTECS No		YE0175000				CAS No		121-44-8					
1,3,5-Triethylbenzene	1340	5	NI	5	NI	4	NI	0	(0)	(2)	(2)	(1)			F	2
Triethylbenzene	707		RTECS No		DC2490000				CAS No		25340-18-5					
Triethylene glycol	1341	0	NI	0	R	0	0	0	0	(1)	1	1			D	1
Triethylene glycol	708		RTECS No		YE4550000				CAS No		112-27-6					
Triethylenetetramine	1346	0	NI	0	NR	3	NI	0	2	(3)	3	3	S		D	3
Triethylenetetramine	709		RTECS No		YE6650000				CAS No		112-24-3					
Triethyl phosphate	1348	0	0	0	NR	1	0	1	0	0	(2)	(2)			D	2
Triethyl phosphate	705		RTECS No		TC7900000				CAS No		78-40-0					
Triethyl phosphite	1349	0	NI	0	R	1	NI	1	0	2	1	2	S		FE	2
Triethyl phosphite	710		RTECS No		TH1130000				CAS No		122-52-1					
Triisopropanolamine	1370	0	0	0	NR	1	0	1	0	0	(2)	3			FD	3

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Triisopropanolamine	711		RTECS No		UB8750000				CAS No		122-20-3					
Triisopropylated phenyl phosphates	1375	5	5	5	R	4	NI	0	0	0	0	0			S	0
Triisopropylated phenyl phosphates	712		RTECS No						CAS No		68937-41-7					
Trimethylacetic acid	1350	1	1	1	R	2	NI	1	1	(2)	2	2			Fp	2
Trimethylacetic acid	714		RTECS No		TO7700000				CAS No		75-98-9					
Trimethylamine	1353	0	NI	0	R	1	NI	1	0	2	3	3			DE	3
Trimethylamine solution (30% or less)	715		RTECS No		PA0350000				CAS No		75-50-3					
1,2,3-Trimethyl benzene	1354	3	3	3	NR	4	0	0	0	1	2	1			FE	2
Trimethylbenzene (all isomers)	716		RTECS No		DC3300000				CAS No		526-73-8					
2,4,4-Trimethyl hexamethylene diamine	1359	1	NI	1	NI	NI	NI	1	0	(3)	2	3	S		D	3
Trimethylhexamethylenediamine (2,2,4- and 2,4,4-isomers)	718		RTECS No		MO1451000				CAS No		26520-58-0					
Trimethyl hexamethylene diisocyanate	1360	0	NI	0	NI	3	NI	0	NI	NI	NI	NI	S		NI	2
Trimethylhexamethylene diisocyanate (2,2,4- and 2,4,4-isomers)	717		RTECS No		MO1760000				CAS No		28679-16-5					
Trimethylol propane polyethoxylate	1362	NI	NI	NI	NR	1	NI	0	0	NI	NI	NI			NI	NI
Trimethylolpropane polyethoxylate	719		RTECS No						CAS No							
Trimethylol propane, propoxylated	2274	0	NI	0	(NR)	1	0	0	0	(1)	0	1			SD	1
Trimethylol propane propoxylated	2870		RTECS No						CAS No							
2,2,4-Trimethyl-1,3-pentanediol diisobutyrate	1845	4	NI	4	NR	0	NI	0	0	(1)	1	0			F	1
2,2,4-Trimethyl-1,3-pentanediol diisobutyrate	26		RTECS No						CAS No							
2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate	1364	3	NI	3	NI	2	NI	0	0	(1)	1	1			Fp	2
2,2,4-Trimethyl-1,3-pentanediol-1-isobutyrate	27		RTECS No		UF6000000				CAS No		25264-77-4					
Trimethyl phosphite	1365	0	NI	0	R	NI	NI	NI	NI	NI	NI	NI			S	NI
Trimethyl phosphite	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		SD	3
1,3,5-Trioxane	10		RTECS No		YK0350000				CAS No		110-88-3					
Tripropylene glycol	1372	0	0	0	NR	0	NI	0	0	(0)	0	0			D	0
Tripropylene glycol	720		RTECS No		YK6825000				CAS No		24800-44-0					
Trixylenyl phosphate	1377	5	4	4	NR	4	1	(0)	(1)	(2)	(1)	(1)			S	2
Trixylyl phosphate	721		RTECS No		ZE8320000				CAS No		25155-23-1					
Tung oil	1378	0	NI	0	R	(2)	NI	(0)	(0)	(1)	(0)	(1)			Fp	2

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EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Tung oil	2784		RTECS No						CAS No							
Turpentine (wood)	1379	4	NI	4	NI	4	NI	0	(0)	1	(2)	2	AS	(T)	D	2
Turpentine	722		RTECS No			YO8400000			CAS No		8006-64-2					
Undecanoic acid	1381	4	NI	4	(R)	3	NI	(0)	(0)	(2)	1	(2)			Fp	2
Undecanoic acid	723		RTECS No			YQ2275000			CAS No		112-37-8					
1-Undecene	1383	5	NI	5	NR	4	NI	(0)	(0)	(1)	(2)	(1)	A		F	3
1-Undecene	24		RTECS No						CAS No		821-95-4					
1-Undecanol	1382	4	NI	4	R	4	NI	0	0	(2)	2	(1)			Fp	2
Undecyl alcohol	724		RTECS No			YQ3155000			CAS No		112-42-5					
Urea	1384	0	0	0	R	1	NI	0	0	(1)	1	(1)			D	1
Urea	2627		RTECS No			YR6250000			CAS No		57-13-6					
Urea/Ammonium mono and dihydrogen phosphate/ Potassium chloride solution	1386	0	0	0	R	3	2	NI	NI	NI	NI	NI			NI	NI
Urea/Ammonium mono- and di-hydrogen phosphate/Potassium chloride solution	727		RTECS No						CAS No							
Urea/Ammonium nitrate solution (> 1% aq. ammonia)	2322	0	NI	0	R	3	NI	0	0	(2)	1	2			D	2
Urea/Ammonium nitrate solution	728		RTECS No						CAS No							
Urea/Ammonium nitrate solution (containing < 1% aq. ammonia)	1387	0	NI	0	R	1	2	0	0	(2)	1	2			D	2
Urea/Ammonium nitrate solution (containing less than 1% free ammonia)	729		RTECS No						CAS No							
Urea-ammonium phosphate solutions	2179	0	0	0	R	3	2	(0)	(0)	(2)	(2)	(2)			D	2
Urea/Ammonium phosphate solution	730		RTECS No						CAS No							
Urea-formaldehyde resin solution	1388	NI	NI	NI	NI	1	NI	1	1	NI	NI	NI	S		NI	2
Urea formaldehyde resin solution	725		RTECS No						CAS No							
Urea	1384	0	0	0	R	1	NI	0	0	(1)	1	(1)			D	1
Urea solution	726		RTECS No			YR6250000			CAS No		57-13-6					
Isovaleraldehyde	1390	1	NI	1	R	3	NI	0	0	0	2	2			D	2
Valeraldehyde (all isomers)	731		RTECS No			ES3450000			CAS No		590-86-3					
Vegetable acid oils	2371	0	NI	0	R	0	NI	(0)	(0)	(1)	(1)	(1)			Fp	2
Vegetable acid oils (m)	3138		RTECS No						CAS No							
Vegetable oils fatty acid distillates	2369	0	NI	0	R	0	NI	(0)	(0)	(0)	(0)	(0)			Fp	2
Vegetable fatty acid distillates (m)	3137		RTECS No						CAS No							
Vegetable protein solution,hydrolyzed	1398	0	NI	0	R	0	NI	(0)	(0)	(0)	(0)	(0)			D	0

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EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Vegetable protein solution (hydrolysed)	734		RTECS No						CAS No							
Vinyl acetate	1400	0	NI	0	R	2	NI	1	0	2	1	1	C		ED	3
Vinyl acetate	735		RTECS No		AK0875000				CAS No		108-05-4					
Vinyl ethyl ether	1405	1	NI	1	NR	1	NI	0	0	0	1	1			E	2
Vinyl ethyl ether	736		RTECS No		KO0710000				CAS No		109-92-2					
Vinylidene chloride	1406	2	1	1	NR	2	NI	2	0	(2)	2	2	M		SD	3
Vinylidene chloride	738		RTECS No		KV9275000				CAS No		75-35-4					
Vinyl neodecanoate	1404	5	NI	5	NR	3	NI	0	0	(3)	3	3			F	3
Vinyl neodecanoate	737		RTECS No						CAS No		45115-34-2					
Vinyl toluenes	1409	3	3	3	NR	3	NI	0	0	2	2	1	NM	(T)	F	3
Vinyltoluene	739		RTECS No		WL5075000				CAS No		25013-15-4					
Citric juices	494	0	0	0	Inorg	0	0	0	0	0	0	0			D	0
Water	740		RTECS No						CAS No							
Petroleum wax	1122	0	NI	0	NR	0	NI	0	0	(0)	0	0			Fp	2
Waxes	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		F	3
White spirit, low (15-20%) aromatic	742		RTECS No						CAS No							
Wood lignin with sodium acetate/oxalate	2403	NI	NI	(0)	NR	(0)	NI	0	(0)	(1)	(1)	(1)			D	1
Wood lignin with sodium acetate/oxalate	3638		RTECS No						CAS No							
Xylene (mixed isomers)	1408	3	NI	3	NR	3	0	0	0	0	2	2		(T)	FE	2
Xylenes	743		RTECS No		ZE2275000				CAS No		133-20-7					
Xylenes/Ethyl benzene (10% or more) mixture	2269	3	2	2	NR	3	1	(0)	(0)	(2)	(2)	(2)		(T)	FE	2
Xylenes/ethylbenzene (10% or more) mixture	2337		RTECS No						CAS No							
Xylenols (mixtures)	1422	2	NI	2	R	3	NI	1	2	(3)	3	3		(T)	Fp	3
Xylenol	744		RTECS No		ZE5425000				CAS No		1300-71-6					
Zinc alkaryl dithiophosphate (C7-C16) (LOA)	1977	0	NI	0	NR	3	NI	0	0	(0)	(0)	(0)			Fp	2
Zinc alkaryl dithiophosphate (C7-C16)	745		RTECS No						CAS No							
Zinc alkenylcarboxamide (LOA)	2053	NI	0	0	NR	0	NI	0	0	(1)	1	(1)			Fp	2
Zinc alkenyl carboxamide	746		RTECS No						CAS No							
Zinc alkyl dithiophosphate	1428	5	NI	5	NR	3	NI	0	0	0	2	2			S	2

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EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Zinc alkyl dithiophosphate (C3-C14)	747	RTECS No							CAS No							
Zinc bromide solutions	2227	Inorg	4	4	Inorg	3	NI	1	(2)	(3)	3B	3	S		D	3
Zinc bromide solutions	2617	RTECS No							CAS No							
Zinc chloride	1425	Inorg	4	4	Inorg	4	1	(1)	(1)	(3)	(3)	(3)			D	3
Zinc chloride	2869	RTECS No							CAS No							
					ZH1400000						7646-85-7					

ANNEX 7

HAZARD PROFILE AMENDMENTS (ref: agenda item 3.5)

Substance	EHS	Change
Acrylonitrile	25	C2 = 3, C3 = 3
1,1,2,2,-Tetrachloroethane	53	D3 = blank, E3 = 2
Methyl salicylate	86	C3 = (2)
Ammonium hydrogen phosphate	98	C3 = (0)
Aluminium chloride (30% or less)/ hydrochloric acid (20% or less) solution	336	C2 = (0)
Butyl butyrate	399	A2 = (R)
Butyl octyl phthalate	410	C2 = (0), D1 = (1), D2 = (1)
Butyl stearate	413	A2 = (R), D1 = 2
Butyric acid	418	C2 = 0
Calcium hydroxide slurry	431	B1 = 2
Calcium hypochlorite solutions (15% or less)	2073	C3 = 2
Calcium hypochlorite solutions (more than 15%)	432	C3 = 2
Carbon disulphide	439	D2 = 3
Chlorobenzene	456	C3 = 2
Chlorosulphonic acid	479	C1 = (2), C2 = (3), C3 = 4, D1 = 3C, D2 = 3, E3 = 3
Crotonaldehyde	528	B1 = 4, D3 = S
Sodium dichromate solution (70% or less)	487	B1 = 4
Coconut oil fatty acid	505	B1 = (3)

ANNEX 8**LIST OF CHEMICALS REVIEWED FOR THE GESAMP-BWWG**

- 1 Sodium bromate
- 2 Potassium bromate
- 3 Bromoform
- 4 Chloroform
- 5 Dibromochloromethane
- 6 Dichlorobromomethane
- 7 Sodium hypochlorite
- 8 Sodium thiosulphate
- 9 Monobromoacetic acid
- 10 Dibromoacetic acid
- 11 Tribromoacetic acid
- 12 Monchloroacetic acid
- 13 Dichloroacetic acid
- 14 Trichloroacetic acid
- 15 Bromochloroacetic acid
- 16 Monochloroamine
- 17 Trichloropropane
- 18 Dibromoacetonitrile

ANNEX 9

OLEFIN SUBSTANCES AND MIXTURES

Name	A1	A1A	A1B	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
1-Pentene	2	2	NI	NI	(2)	NI	(0)	(0)	0	(0)	(1)			E	2
2-Pentene	2	2	NI	NI	2	NI	(0)	(0)	(0)	(0)	(1)			E	2
Isopentene	2	2	NI	NI	2	NI	(0)	(0)	(0)	(0)	(1)			E	2
Pentene (all isomers)	2	2	NI	NI	(2)	NI	(0)	(0)	(0)	(0)	(1)			E	2
1-Hexene	3	3	NI	R	3	NI	0	0	0	1	1			E	2
2-Hexene (Mixed isomers)	3	3	NI	R	3	NI	(0)	(0)	(1)	(1)	(1)			E	2
Propylene dimer	3	3	NI	R	3	NI	NI	NI	NI	NI	NI			E	2
Hexene (all isomers)	3	3	NI	R	3	NI	(0)	(0)	(1)	(1)	(1)			E	2
1-Heptene	3	3	NI	NI	2	NI	(0)	(0)	(0)	(2)	(1)			E	2
Heptene (all isomers)	3	3	NI	NI	2	NI	(0)	(0)	(0)	(2)	(1)			E	2
Octene (all isomers)	4	4	NI	R	3	NI	0	0	0	2	1	A		FE	2
1-Nonene	4	4	NI	NI	3	NI	0	0	0	1	1	A		FE	2
Propylene trimer	4	5	4	NR	3	2	(0)	(0)	(1)	(1)	(1)			FE	2
Nonene (all isomers)	4	4	NI	NI	3	NI	0	0	0	1	1	A		FE	2
1-Decene	5	5	NI	R	4	2	0	0	0	2	0	A		F	3
1-Undecene	5	5	NI	NR	4	NI	(0)	(0)	(1)	(2)	(1)	A		F	3
Dodecene (all isomers)	5	5	NI	NR	4	NI	0	0	(2)	2	1	A		F	3
Propylene tetramer	4	NI	4	NR	(4)	NI	(0)	(0)	(1)	(1)	(1)			F	1
1-Hexadecene	0	0	NI	NR	0	NI	0	0	0	0	0		0	Fp	2
MIXTURES															
Olefin mixture (C5-C7)	3	3	NI	R	3	NI	(0)	(0)	(1)	(2)	(1)			E	2
Olefin mixture (C7-C9)	4	5	4	NR	4	NI	(0)	0	0	2	1	A		E	2
Olefin mixture (C5-C15)	(5)	(5)	NI	NR	(4)	NI	(0)	(0)	(2)	(2)	(1)	A		FE	2
Alpha-Olefins (C6-C18), mixture	(5)	(5)	NI	NR	(4)	NI	(0)	(0)	(2)	(2)	(1)	A		FE	2
Olefins C13 and above, all isomers	5	5	NI	NR	0	NI	0	0	(0)	0	0			Fp	2

ANNEX 10

**DRAFT WORK PROGRAMME FOR THE FORTY-SEVENTH 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
 - 3 Evaluation of new substances
 - 4 Correspondence with industry
 - 5 Consolidation of data
 - 6 Ballast Water Treatment By-Products
 - 7 Communication and publication
 - 8 Any other business
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