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PPR.1/Circ.6
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HAZARD EVALUATION OF SUBSTANCES TRANSPORTED BY SHIPS

**Report of the fifty-sixth session of the GESAMP Working Group on the
Evaluation of the Hazards of Harmful Substances Carried by Ships**

The report of the fifty-sixth session of the GESAMP Working Group on the Evaluation of the Hazards of Harmful Substances Carried by Ships (GESAMP/EHS Working Group), held from 8 to 12 April 2019, is attached.

Any comments or questions should be addressed to:

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WORKING GROUP ON THE EVALUATION
OF THE HAZARDS OF HARMFUL
SUBSTANCES CARRIED BY SHIP
56th session
Agenda item 9

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1 INTRODUCTION

1.1 The fifty-sixth session of the GESAMP Working Group on the Evaluation of the Hazards of Harmful Substances Carried by Ships (GESAMP/EHS Working Group) was held at IMO in London, United Kingdom, from 8 to 12 April 2019, chaired by Dr. Thomas Höfer. The list of experts attending the meeting is set out in annex 1.

1.2 The Group reviewed the agenda and the provisional timetable, and agreed to some modifications to the timetable. Subsequently, the Group adopted both.

2 OUTCOME OF OTHER BODIES

Outcome of GESAMP 45

2.1 The Group noted the report by the Chair on the outcome of the forty-fifth session of GESAMP, which took place from 17 to 20 September 2018 in Rome, Italy, hosted by the Food and Agriculture Organization (FAO). A summary of the outcome of the meeting is set out in annex 2.

Outcome of IMO bodies

2.2 The Group noted that the following meetings of relevance had taken place since the fifty-fifth session of the GESAMP/EHS Working Group:

- .1 the twenty-fourth intersessional meeting of the Working Group on the Evaluation of Safety and Pollution Hazards of Chemicals (ESPH 24), which took place from 1 to 5 October 2018 (PPR 6/3); and
- .2 the Working Group on the Evaluation of Safety and Pollution Hazards (ESPH), which met during the sixth session of the PPR Sub-Committee from 18 to 20 February 2019 (PPR 6/WP.3).

2.3 The Group noted the information presented by the Secretariat on the outcome of the above-mentioned meetings on matters of relevance to the work of the GESAMP/EHS Working Group, as summarized in annex 3.

2.4 The Group noted that PPR 6 had invited GESAMP/EHS to review the guidance contained in the draft PPR.1 circular on decisions with regard to the categorization and classification of products (PPR 6/20, annex 5), and to consider the possibility of a review and update of GHP ratings for products in the GESAMP Composite List, in line with this guidance, for purposes of consistency and harmonization (PPR 6/20, paragraph 3.38).

2.5 The Group reviewed the above-mentioned draft PPR.1 circular and also reviewed the draft revised MEPC.1/Circ.512 on guidelines for the provisional assessment of liquid substances transported in bulk (PPR 6/20, annex 4). Subsequently, the Group agreed to suggest the following editorial modifications:

- .1 the addition under paragraph 1.12 of the draft revised MEPC.1/Circ.512 of a reference to the revised GESAMP Hazard Evaluation Procedure for Chemicals Carried by Ships, specifically under "GESAMP Hazard Profile", and the inclusion in appendix 2 of the up-to-date reference to the revised GESAMP Hazard Evaluation Procedure for Chemicals Carried by Ships; and

-
- .2 in paragraph .9 of the draft PPR.1 circular on decisions with regard to the categorization and classification of products (PPR 6/20, annex 5), the reference to BLG/Circ.15 should be replaced with the up-to-date reference to the revised *GESAMP Hazard Evaluation Procedure for Chemicals Carried by Ships*.

2.6 In the context of the draft PPR.1 circular on decisions with regard to the categorization and classification of products (PPR 6/20, annex 5), the Group requested the Secretariat to bring the following points to the attention of ESPH 26:

- .1 The last sentence of paragraph .6 could be reworded, with a view to avoiding any misunderstanding that minerals are readily biodegradable. As a suggestion the sentence should indicate that the rating of Inorg is treated as being equivalent to an R rating for the purpose of following the guidance rules for pollution category and ship type.
- .2 The last sentence of paragraph .11 may be misinterpreted as an obligation for the submitters to inform GESAMP/EHS that a submission relates to a reduced hazard profile. As a suggestion the word "should" could be replaced by "may".
- .3 In the context of paragraph .12, it should be noted that the GESAMP/EHS Working Group includes in the EHS name of mixtures an indication of components that have an impact on the environmental or health hazards of the mixture, as appropriate. This could result in mineral oil being reflected in the EHS name.

2.7 In relation to the possibility of a review and update of GHP ratings for products in the GESAMP Composite List, in line with the guidance contained in the draft PPR.1 circular on decisions with regard to the categorization and classification of products, the Group advised that the GHP ratings reflect scientific data. The Group agreed that it is not appropriate to show amended GHP ratings in the Composite List based on the guidance in the draft revised PPR.1 circular.

Cut-off values to be used when assessing mixtures containing components with a long-term health effect

2.8 The Group recalled that PPR 5 had requested it to consider the proposal in document PPR 5/3/3 (Norway) and to advise the ESPH Working Group with regard to recommended cut-off values to be used when assessing mixtures containing components with a long-term health effect.

2.9 The Group also recalled that due to time constraints at its fifty-fifth session, it had been unable to finalize the requested advice but had agreed that the relevant text from the revised GESAMP Hazard Evaluation Procedure for Chemicals Carried by Ships would form the basis for developing a recommendation, at EHS 56, for consideration by the ESPH Working Group.

2.10 The Group agreed that the table of concentrations of ingredients of a mixture that would trigger long-term health effect ratings for that mixture, which had been developed by the Group and included in the draft revised GESAMP Hazard Evaluation Procedure for Chemicals Carried by Ships, could be used by the ESPH Working Group. The rules are set out in annex 4. With regard to the two thresholds for mutagenicity, sensitization (skin and respiratory) and target organ toxicity, the Group was of the view that the ESPH Working Group could go for the

worst-case option and use the lower percentage limits when utilizing the mixture calculation rules for assigning carriage requirements. In this context, the Group noted the perspective that manufacturers could request GESAMP/EHS for a full profile of a mixture, which would then be rated based on the appropriate percentage limits for the subcategories of the above-mentioned health effects, subject to appropriate data being submitted.

3 EVALUATION OF NEW SUBSTANCES

3.1 The Group recalled that when submitting new substances for evaluation by the GESAMP/EHS Working Group, a full set of data, addressing all the relevant information requirements set out in the GESAMP/EHS Product Data Reporting Form, was required. The Group further noted that insufficient data, or a lack of adequate supporting arguments, where estimates had been used, would result in no rating being assigned for the end-point concerned or, as a worst case, no full hazard profile being issued for the chemical under review. In addition, the Group emphasized that requests for evaluations of mixtures, for which the assessment would be based on data for individual components of the mixture, should be accompanied by detailed and realistic compositional information (i.e. percentages, ratios or concentrations of the components).

3.2 The Group considered the following new substances, which had been submitted for evaluation to this session:

.1	alpha-Olefins (C12+), mixture	EHS 2516
.2	Alkyl (C3-C11) benzenes with phenol-formaldehyde/acrylate polymers (33% or less)	EHS 2517
.3	Sodium oxalate solution	EHS 2518

3.3 The Group, in assessing the submitted products, made observations and reached conclusions, as set out in the ensuing paragraphs. The resultant hazard profiles assigned by the Working Group for inclusion in the GESAMP Composite List are set out in annex 5.

EHS 2516 alpha-Olefins (C12+), mixture

3.4 In considering the submission, the Group noted that according to the information provided, the product was a mixture of variable composition of different organic aliphatic substances. The information on composition according to the submitter indicated that each of the ingredients may be present in a range from 0 to 100%. The Group also noted that no impurities (e.g. alpha-olefins of a chain length lower than 12) were reported. In this regard, the Group reiterated that submitters should provide detailed and realistic compositional information (i.e. percentages, ratios or concentrations of the components) in order for the Group to be able to produce an accurate GESAMP Hazard Profile.

3.5 Notwithstanding the above, the Group considered the data provided for the product and assigned a GESAMP Hazard Profile accordingly. In reviewing the data available, the Group noted that the acute inhalation toxicity of the vapour of the mixture was lower than the toxicity based on exposure to mist. Therefore, the Group agreed to append a hash mark (#) to the entry, denoting that a lower acute inhalation risk may be considered for the purposes of risk management of exposure to the vapour.

<i>Rating</i>	A1a=(5)	A1b=(5)	A1=(5)	A2= (R)	B1= (0)	B2= NI
	C1= (0)	C2= (0)	C3= (1)	D1= (1)	D2= (0)	D3= A
	E2= Fp	E3= 3				(#) to the entry

EHS 2517 Alkyl (C3-C11) benzenes with phenol-formaldehyde/acrylate polymers (33% or less)

3.6 In considering the submission, the Group noted that a full set of data had been provided for the mixture and all components. Consequently, the Group assigned a GESAMP Hazard Profile accordingly. In reviewing the data available, the Group noted that the acute inhalation toxicity of the vapour of the mixture was lower than the toxicity based on exposure to mist. Therefore, the Group agreed to append a hash mark (#) to the entry, denoting that a lower acute inhalation risk may be considered for the purposes of risk management of exposure to the vapour.

<i>Rating</i>	A1a= 4	A1b= NI	A1= 4	A2=NR	B1=2	B2=0
	C1=0	C2=0	C3=(2)	D1=(2)	D2=(2)	D3=MASs
	E2 = F	E3 =3				(#) to the entry

EHS 2518 Sodium oxalate solution

3.7 In considering the submission, the Group noted that a full set of data had been provided for the product and assigned a GESAMP Hazard Profile accordingly. The assessment was based on the most concentrated aqueous solution. Having also noted the low vapour pressure, the Group agreed to append a hash mark (#) to the entry, denoting that a lower acute inhalation risk may be considered for the purposes of risk management of exposure to the vapour.

<i>Rating</i>	A1a= 0	A1b= (1)	A1= (1)	A2=R	B1=2	B2=1
	C1=1	C2=0	C3=(2)	D1=(2)	D2=2	D3=blank
	E2 = D	E3 =2				(#) to the entry

4 RE-EVALUATION OF SUBSTANCES AND CONSIDERATION OF ISSUES RELATED TO EVALUATIONS

4.1 The Group recalled that, as part of its work, it routinely considered requests for the re-assessment of products, based on the submission of new data or new scientific insights into the hazards of substances that may result in a change to a hazard profile.

4.2 The Group also recalled its ongoing review and update of the existing GESAMP/EHS files for completeness and consistency and the need for communication of any amendments relating to such matters, bringing these to the attention of IMO (i.e. the ESPH Working Group of the PPR Sub-Committee).

4.3 The Group considered a request to undertake a review of the hazard profiles for Ethyl tert-butyl ether (EHS 2085), Fish by-products (fresh) (EHS 2499), Fish silage (containing 3% or less formic acid with antioxidant) (EHS 2500) and Sodium aluminate (solution) (EHS 1234). In the context of the latter substance, the Group also agreed to re-evaluate Sodium hydroxide (30% or less)/Sodium aluminate (25% or less) solution (EHS 2486). Any agreed modifications to the respective hazard profiles for these substances are highlighted in the revised GESAMP Composite List, set out in annex 6.

EHS 2085 Ethyl tert-butyl ether

4.4 The Group considered a request for a re-evaluation of the B2 rating for this material. In reviewing the data available, the Group agreed to amend column B2 from NI to 0. The Group noted that the acute inhalation toxicity of the vapour of the mixture was lower than the toxicity based on exposure to mist. Therefore, the Group agreed to append a hash mark (#) to the entry, denoting that a lower acute inhalation risk may be considered for the purposes of risk

management of exposure to the vapour. The Group also amended a number of other ratings, as set out below.

Amended rating A2=NR B2=0 C3=(1) D1=1 D2=0 E3=1
(#) to the entry

EHS 2499 Fish by-products (fresh)

4.5 The Group considered a request for a re-evaluation of the E2 rating for this material. Having reviewed the information provided, the Group amended the E2 rating as set out below.

Amended rating E2=FD

EHS 2500 Fish silage (containing 3% or less formic acid with antioxidant)

4.6 The Group considered a request for a re-evaluation of the E2 rating for this material. Having reviewed the new information provided by the submitters, which included information on composition and solubility, the Group amended the E2 rating as set out below.

Amended rating E2=FD

EHS 1234 Sodium aluminate (solution)

4.7 The Group considered a request for a re-evaluation of this material. In reviewing the data available, the Group amended the B1 and B2 ratings, as set out below.

Amended rating B1=3 B2=1

EHS 2486 Sodium hydroxide (30% or less)/Sodium aluminate (25% or less) solution

4.8 Having reviewed Sodium aluminate (solution) (EHS 1234), the Group also re-evaluated Sodium hydroxide (30% or less)/Sodium aluminate (25% or less) solution (EHS 1253), taking into account that similar data considerations to the former substance would apply. Subsequently, the Group amended the B1 and B2 ratings, as set out below.

Amended rating B1=3 B2=1

4.9 The Group further agreed to revise ratings for seven substances that were already listed in the Composite List (see paragraphs 4.10 to 4.16 below), based on discussions emanating from the review of the new substances that had been submitted at this session. Any agreed modifications to the respective hazard profiles for these substances are highlighted in the revised GESAMP Composite List, set out in annex 6.

EHS 720 Dodecene (all isomers)

4.10 The Group reviewed the ratings for Dodecene (all isomers) (EHS 720) and modified the ratings as set out below. In reviewing the data available, the Group noted that the acute inhalation toxicity of the vapour of the mixture was lower than the toxicity based on exposure to mist. Therefore, the Group agreed to append a hash mark (#) to the entry, denoting that a lower acute inhalation risk may be considered for the purposes of risk management of exposure to the vapour.

Amended rating C3=1 D1=1 D2=0 (#) to the entry

completing the work at EHS 57 for incorporation in the Composite List once the revised GESAMP Hazard Evaluation Procedure for Chemicals Carried by Ships had been published. This will amend the E1 column in the GESAMP Hazard Profile from indicating tainting to rating flammability.

6 CONSOLIDATION OF EXISTING DATA FILES

6.1 The Group recalled the ongoing review of the GESAMP/EHS files was a regular agenda item.

6.2 Not having had sufficient time to review these files during the session, in light of other higher priority work on its agenda, the Group agreed to defer consideration of this item to its next session.

7 COMMUNICATION AND PUBLICATION

7.1 The Chair informed the Group of the review of the draft revised GESAMP Hazard Evaluation Procedure for Chemicals Carried by Ships being conducted by GESAMP. In this regard, the Group considered feedback from the GESAMP reviewers and agreed on amendments to the draft. As the review process was ongoing, the Group noted that the Chair would contact the members of GESAMP/EHS should there be any further comments by the reviewers that would require significant amendments to the draft.

7.2 Subsequently, the Group invited the Secretariat to take the appropriate action for finalizing the publication of the revised GESAMP Hazard Evaluation Procedure for Chemicals Carried by Ships, once the review had been finalized.

8 ANY OTHER BUSINESS

8.1 Based on the volume of information contained in submissions in recent sessions, the Group suggested that the deadline for submissions to future GESAMP/EHS meetings should be set sufficiently in advance of the meeting so as to allow the members of the Group to commence preparatory work at least three weeks prior to the session.

Draft provisional agenda and date of the next session

8.2 The Group agreed to the draft provisional agenda for its next session, set out in annex 7, and that its next meeting had been tentatively scheduled to take place from 4 to 8 May 2020, at IMO headquarters in London. Subject to the aforementioned dates being confirmed, the deadline for manufacturers to submit information to GESAMP/EHS 57 would be 6 March 2020.

9 CONSIDERATION AND ADOPTION OF THE REPORT

9.1 The Group adopted its report, noting that it would be circulated as PPR.1/Circ.6.

ANNEX 1

**LIST OF MEMBERS ATTENDING THE FIFTY-SIXTH SESSION
OF THE GESAMP/EHS WORKING GROUP**

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ANNEX 2

REPORT ON GESAMP ACTIVITIES

1 The Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) held its forty-fifth session, from 17 to 20 September 2017, in Rome, Italy, hosted by the Food and Agriculture Organization (FAO). The session was held under the Chairmanship of Dr. Peter Kershaw.

GENERAL ACTIVITIES

2 The Group recognized the services of Dr. Stefan Micallef, Administrative Secretary for GESAMP, who could not attend the session due to his retirement from United Nations service. It was noted that Dr. Micallef had more than 20 years of experience in GESAMP, initially as a member of Working Group 1 (1995-2001), then a Technical Secretary for Working Group 1 (2005-2007), and finally as Administrative Secretary for GESAMP in his position as the Director of the Marine Environment Division of IMO (2007-2018).

3 GESAMP noted that the independence, credibility and cost-effectiveness of GESAMP was well recognized, and the continuing delivery of high-quality outputs were appreciated. This could only be maintained with continuing support of the UN Sponsoring Organizations. The addition of the International Seabed Authority (ISA) as one of GESAMP's sponsoring organizations was noted with great appreciation and showed the growing interest for GESAMP's work within the UN system.

4 The 10 Sponsoring Organizations committed to support the activities of GESAMP in 2018/2019 at least to the level of the previous years. In 2019, GESAMP will be celebrating 50 years since its establishment in 1969. In this context, the GESAMP Office will organize an anniversary task team to prepare for GESAMP's 50th anniversary in New York.

WORKING GROUP 1

5 The Chair of Working Group 1 reported on progress made during EHS 55 and the months after. GESAMP noted:

- .1 that 11 new substances had been evaluated and full GESAMP Hazard Profiles (GHPs) assigned, and that the GHPs for four substances had either been modified or reconfirmed, based on consideration of new data;
- .2 the WG's finalization of the revision of the existing hazard evaluation procedure;
- .3 the WG's progress in drafting a new GESAMP Reports and Studies report with its publication planned to be in time for GESAMP's 50th anniversary in 2019; and
- .4 that the IMO ESPH Working Group and the PPR Sub-Committee had requested Working Group 1 (WG 1) to give more guidance for the hazard evaluation of mixtures.

6 GESAMP noted that WG 1 had informally discussed the procedures and the workload when evaluating new substances. The total volume of data sets, the number of publications linked to the submitted data and the risk assessment reports on the chemical substances involved have all increased significantly during the last decade. The main reason for such an

increase in the volume of data sets is the European chemicals policy with the requirements set under the so-called REACH regulation. Under this European legislation, the chemical industry has not only to establish a full set of safety information including competent summaries of scientific studies, but also to compile specific Chemical Safety Reports (CSR). Such reports usually exceed 100 pages (often running into several hundred pages as in the cases of the substances evaluated during EHS 55) and are of a confidential nature. With the number of submissions to be evaluated during a five-day session, a full study of such documents by all members of the Working Group is not possible. New ways of making such confidential information available for the Working Group's experts in preparation of the meeting should be discussed. It was noted that there were legal restrictions for circulation of confidential data and practical challenges concerning the overall workload of the members of the Working Group when such homework would be introduced. The situation will be further discussed within WG 1.

7 GESAMP further noted that WG 1 initiated discussions on possible future amendments to the existing guidance during its fifty-third session in 2016, developed first drafts intersessionally and finalized draft texts and rationales during the fifty-fourth session in 2017. In 2018, at the fifty-fifth session, the Group considered the draft revision of this Hazard Evaluation Procedure that had been prepared intersessionally by EHS expert subgroups under the coordination of the Chair. As requested by IMO bodies, WG 1 developed guidance for assessing mixtures during its fifty-fifth session and finalized it by correspondence during the weeks after to be integrated into the new Hazard Evaluation Procedure.

8 Having recalled the agreed timeline for completion of the revision of the Hazard Evaluation Procedure for finalization and publication in time for the 50th anniversary of GESAMP in 2019, the Group comprehensively reviewed the draft that had been prepared intersessionally and concluded that all technical and scientific matters had been considered sufficiently and to the satisfaction of the Group. GESAMP noted the progress and agreed that, as the draft revision was a result of a comprehensive review by WG 1, it should be subject to a formal review by GESAMP and it should be assigned a new Report and Studies number. Subsequently, GESAMP invited the Secretariat to take appropriate action for the revised "GESAMP Hazard Evaluation Procedure for Chemicals Carried by Ships, 2019" to be published before EHS 56.

8 The terms of reference of the GESAMP EHS Working Group, as given by GESAMP at its sixth session in 1974 and amended at its eighth session in Rome (1976) are: "To examine and evaluate data and to provide such other advice as may be requested, particularly by IMO, for evaluating the environmental hazards of harmful substances carried by ships, in accordance with the rationale approved by GESAMP for this purpose".

9 GESAMP noted that the above terms restricted the scientific evaluation and advice to environmental hazards. However, during the last years, Working Group 1 had been requested to evaluate occupational hazards for ships crews and those handling the cargo, as well as to offer advice on maritime emergency response. The GESAMP Hazard Profile is used by IMO and maritime administrations for assigning minimum carriage requirements for the transport of liquid bulk cargoes in general. Most of these technical requirements target ship safety, many relate to environmental protection and others relate to occupational protection. Upcoming IMO regulations will specify the involvement of the GESAMP EHS Working Group and the use of the GESAMP Hazard Profile in all of these three areas.

10 Accordingly, GESAMP approved the revised Terms of Reference for Working Group 1 to read as follows: "The GESAMP Working Group on the Evaluation of the Hazards of Harmful Substances Carried by Ships is an expert group to provide best available scientific assessment of the environmental, occupational and safety hazards of chemicals, in particular to:

- .1 provide scientific advice on the hazards of chemicals transported by ships as may be requested, particularly by IMO;
- .2 evaluate safety data and test reports on specific chemicals submitted by industry in accordance with the rationale approved by GESAMP for this purpose and create a GESAMP Hazard Profile for such chemicals accordingly;
- .3 maintain a list of hazard evaluations ("Composite List" of GESAMP Hazard Profiles) for the use by IMO and keep it up to date based on available scientific data; and
- .4 observe the developments concerning the international harmonization of hazard classification by the United Nations and scientific guidance on hazard assessment published by international organizations to improve the GESAMP hazard evaluation procedure and GESAMP hazard ratings."

OTHER WORK

11 The task of **Working Group 34** (WG 34), the "GESAMP Ballast Water Working Group", is to evaluate the risks for the crew and the ships safety, the risk for the public at large, and the environmental safety of the Ballast Water Management Systems. During two sessions in November 2017 and June 2018, the Group evaluated three systems. WG 34 had initiated the drafting of a Reports & Studies report on the whole subject including the Methodology for working procedures. GESAMP decided that the current draft should be distributed among GESAMP members for peer review, for the final publication to be available before the 50th anniversary of GESAMP in 2019. (Review has taken place.)

12 **Working Group 38** on "Atmospheric input of chemicals to the ocean" had prepared a synthesis of the results from seven scientific papers in a report which had been reviewed by GESAMP and published in early 2018 as Reports & Studies No.97. The work led to the new scientific activities on the changing atmospheric acidity and the impact of ocean acidification on fluxes of non-CO₂ climate-active species in two workshops in February and March 2018 with 34 scientists from 15 countries.

13 **Working Group 39**, the "Establishment of trends in global pollution in coastal environments" is to provide a retrospective analysis using dated environmental archives and time-series data from peer-reviewed published research. The Working Group had completed a draft report by August 2018, first reviewed by GESAMP members, followed by external reviewers in the latter half of 2018. Some principal issues resulting from the review were discussed, which resulted in amendments of the graphical presentation. GESAMP agreed that after completion, the report should be published. GESAMP noted that, overall, the results presented in the report showed that for most contaminants that have been regulated the concentration had gone down, which should be highlighted better, since this would be particularly important, when interpreted in a policy context.

14 "Sources, fate and effects of plastics and micro-plastics and in the environment" are dealt with in **Working Group 40** (WG40). WG 40 held three workshops in September 2017 in Paris, in March 2018 in San Diego, and in June 2018 in Bangkok. A report on guidelines covering terminology and methodologies for the monitoring and assessment of marine macro-plastics and microplastics was finalized in late 2018 and published as Reports and Studies No.99.

15 **Working Group 41**, the "Working Group on marine geoengineering" had finalized a draft report, which underwent internal and external review. GESAMP noted that the report

would be published in early 2019. The Working Group had no scheduled meetings and depending on the discussion of the report, the lead agencies would consider their interest in further funding. Key points from the report were: .1 some 25 approaches had been assessed in 8 categories; .2 the information available varied widely from just concepts to many scientific papers; .3 there was generally insufficient information to assess to permit robust scientific assessment; and .4 consequently, the WG focused on evaluating illustrative examples from each of the eight categories. The report has since been published as Reports and Studies No.98.

16 In 2016, GESAMP established **Working Group 42** on the "Impacts of wastes and other matter in the marine environment from mining operations, including deep-sea mining", which had its first meeting in September 2017. A draft report was expected to be finalized in late 2018 to be reviewed in early 2019.

17 As always, the Sponsoring Organizations and the Secretariat reported their work related to the marine environment, e.g. the UN Regular Process and the 2030 Agenda for Sustainable Development, the Sustainable Development Goals (SDGs) and the United Nations Decade of Ocean Science for Sustainable Development. GESAMP experts are involved in some of these activities.

18 FAO, supported by IMO, proposed the establishment of a new working group on Sea-based sources of marine litter, including fishing gear and other shipping-related matter. GESAMP agreed in principle to the establishment, pending the development of a full working group proposal, including terms of reference. (This was approved in early 2019.)

19 GESAMP agreed to further scope out the issue of the impact of "armed conflict on the marine environment" in the intersessional period. GESAMP noted the progress of some scoping activities including the "Relevance of inputs of disinfection byproducts (DBPs) into the marine environment", the "Update the Information on Sources of the Main Pollutants Impacting the Global Marine Environment (The 80:20 Conundrum)" and "Sand and Gravel Mining".

20 Several institutions and NGOs presented their work on marine environment protection, including the World Maritime University, Greenpeace, Oceana, NAFO and ACOPS. On one afternoon GESAMP held a special side event titled "Harmful algal blooms and food security and safety in the context of climate change".

ANNEX 3

OUTCOME OF ESPH 24 AND THE ESPH WORKING GROUP AT PPR 6

1 OUTCOME OF ESPH 24

Evaluation of chemicals

1.1 ESPH 24 considered a number of products as part of its routine assessment and assignment of carriage requirements, in accordance with the IBC Code. Decisions that were based on the outcome of GESAMP/EHS 55 or that are relevant to GESAMP/EHS 56 are summarized below.

VAPOUR-RELATED CARRIAGE REQUIREMENTS FOR NON-VOLATILE CORROSIVE PRODUCTS

1.2 The Group considered document ESPH 24/3/26 (Norway), which proposed that the Group reconsider the requirements for controlled venting and increased ventilation rates for non-volatile corrosive products in a similar manner as had been done at PPR 5 for non-volatile toxic products.

1.3 In this context, the Group recalled that the ESPH Working Group at PPR 5 had agreed to follow, on a case-by-case basis, a similar approach for non-volatile solid substances transported in aqueous solutions as had been used in the case of inorganic brines (see BLG.1/Circ.33, annex, paragraph 10) in relation to inhalation toxicity when the SVC/LC₅₀ ratio could not be calculated due to the exact vapour pressure of the solid not being available.

1.4 The Group further recalled that the rationale behind the above-mentioned decision was that, in general, the vapour pressure of solid substances was very low and only water vapour (i.e. non-toxic vapours) would be emitted when transporting such non-volatile solid substances in aqueous solution.

1.5 Subsequently, the Group agreed that the same rationale could be extended, on a case-by-case basis, to non-volatile corrosive solid substances transported in aqueous solutions. Specifically, it would be applicable when considering vapour-related requirements such as whether controlled or open venting arrangements should be assigned (column g of chapter 17 of the IBC Code) or whether or not increased ventilation would be required (paragraph 15.17 of the IBC Code). The Group also agreed to amend paragraph 10 of the annex to BLG.1/Circ.33 accordingly.

1.6 The Group noted that, had the above decision regarding non-volatile corrosive solid substances been reached before or during PPR 5, less stringent requirements could have been assigned in columns g and o (i.e. "Open" in column g, "No" in column n and no "15.17" in column o) for "Potassium hydroxide solution", "Sodium borohydride (15% or less)/sodium hydroxide", "Sodium chlorate solution (50% or less)", "Potassium formate solutions" and "Sodium hydroxide solution" in the draft revised chapter 17 of the IBC Code (PPR 5/24/Add.1).

1.7 In this regard, the Group suggested that the delegation of Norway could submit a document to MEPC 74 and MSC 101 proposing that the carriage requirements in columns g, n and o for "Potassium hydroxide solution", "Sodium borohydride (15% or less)/sodium hydroxide", "Sodium chlorate solution (50% or less)", "Potassium formate solutions" and "Sodium hydroxide solution" be modified prior to the adoption of the draft revised chapter 17 of the IBC Code.

Guidance for assessing and classifying products under Annexes I and II of MARPOL

Energy-rich fuels

1.8 The Group agreed that the following products, that were listed in annex 11 (Biofuels recognized under the *2011 Guidelines for the carriage of blends of petroleum oil and biofuels*) of MEPC.2/Circ.23, fulfilled the characteristics described in section 4 of the draft guidelines for the carriage of energy-rich fuels and their blends:

- .1 Alkanes (C4-C12) linear, branched and cyclic (containing benzene up to 1%);
- .2 Alkanes (C5-C7), linear and branched;
- .3 Alkanes (C9-C24) linear, branched and cyclic with a flashpoint $\leq 60^{\circ}\text{C}$;
- .4 Alkanes (C9-C24) linear, branched and cyclic with a flashpoint $>60^{\circ}\text{C}$;
- .5 Alkanes (C10-C17), linear and branched;
- .6 Alkanes (C10-C26), linear and branched with a flashpoint $\leq 60^{\circ}\text{C}$; and
- .7 Alkanes (C10-C26), linear and branched with a flashpoint $>60^{\circ}\text{C}$.

1.9 Consequently, the Group agreed that, subject to the draft guidelines for the carriage of energy-rich fuels and their blends being approved at MEPC 73, the products listed in paragraph 1.8 above should be listed in a new annex 12 (Energy-rich fuels subject to Annex I of MARPOL) to MEPC.2/Circ.24 (issued on 1 December 2018). Accordingly, the above-mentioned products and their corresponding biofuel entries would be deleted from list 1 and annex 11 of the MEPC.2/Circular, as appropriate.

1.10 With regard to consequential amendments emanating from the inclusion of the annex 12 to MEPC.2/Circ.24, the Group noted that consequential modifications would have to be made to the draft revised chapter 17 of the IBC Code prior to its adoption (i.e. deletion of the entries that had been included in annex 12 to MEPC.2/Circ.24, as well as deletion of their corresponding biofuel blend entries).

1.11 Similarly, consequential amendments to the *2011 Guidelines for the carriage of blends of petroleum oil and biofuels, as amended* (MEPC.1/Circ.761/Rev.1) would have to be made (i.e. deletion of references to alkanes (C10-C26), linear and branched with a flashpoint of either 60°C or less or more than 60°C).

2 OUTCOME OF THE ESPH WORKING GROUP AT PPR 6

Evaluation of chemicals

2.1 The Group evaluated and assigned minimum carriage requirements for one list 1 products and three list 3 products (PPR 6/WP.3, section 3 and annexes 1 and 2).

Draft modifications to the draft amendments of the IBC Code

2.2 The Group recalled that ESPH 24 had noted that, as a result of the addition of annex 12 to MEPC.2/Circ.24, consequential modifications to the draft revised chapters 17 and 19 of the IBC Code would need to be introduced prior to their adoption (i.e. deletion of the

entries that had been included in annex 12 to MEPC.2/Circ.24, as well as deletion of their corresponding biofuel blend entries).

2.3 Consequently, the Group prepared draft modifications to the draft revised chapters 17 and 19 of the IBC Code. The full set of modifications to the amendments are set out in annex 5 to document PPR 6/WP.3, to be considered and adopted together with the amendments to the IBC Code by MEPC 74 and MSC 101.

Revision of MEPC.2/Circ.512

2.4 The Group, having recalled that PPR 5 had requested GESAMP/EHS 55 to advise the ESPH Working Group with regard to recommended cut-off values to be used when assessing mixtures containing components with long-term health effects, considered whether to await the outcome of this work by the GESAMP/EHS Working Group for the current revision of the MEPC.1/Circ.512. However, having noted that the revision of the circular was almost finished and the timeline for the completion of the work by GESAMP/EHS was unclear, the Group agreed that there was no need to include this in the current revision of the circular and instead to revisit this at a future session once GESAMP/EHS had completed its work.

2.5 Having agreed on a number of final modifications and having resolved the outstanding issues, including the development of recommendations for the assessment of complex petrochemical mixtures, the Group finalized the draft revision to MEPC.1/Circ.512 on *Revised guidelines for the provisional assessment of liquid substances transported in bulk*, as set out in annex 7 to document PPR 6/WP.3.

Revision of BLG.1/Circ.33

2.6 The Group recalled that ESPH 24 had prepared an updated draft list of decisions with regard to the classification of products, as set out in annex 5 to document PPR 6/3. The Group further recalled that ESPH 24 had agreed that the ESPH Working Group at PPR 6 would prepare a final revised circular for consideration by the Sub-Committee.

2.7 The Group reviewed the draft in detail and, having agreed on a number of final modifications, finalized the draft revised PPR circular on decisions with regard to the categorization and classification of products, as set out in annex 8 to document PPR 6/WP.3.

2.8 The Group further agreed to invite GESAMP/EHS to review the guidance contained in the circular and to consider the possibility of a review and update of GHP ratings for products in the GESAMP Composite List, in line with this guidance, for purposes of consistency and harmonization.

ANNEX 4

**CONCENTRATION OF INGREDIENTS OF A MIXTURE THAT WOULD TRIGGER
LONG-TERM HEALTH EFFECT RATINGS OF A MIXTURE**

Column D3	Hazard evaluation	Concentration limit
C	Carcinogenicity	≥ 0.1%
M	Mutagenicity	≥ 0.1%
	Mutagenicity equivalent to GHS cat. 2	≥ 1%
R	Reproductive toxicity	≥ 0.3% *
Ss	Skin sensitization equivalent to GHS sub-cat. 1A	≥ 0.1%
	Skin sens. equivalent to GHS sub-cat. 1B	≥ 1%
Sr	Respiratory sensitization equivalent to GHS sub-cat. 1A	≥ 0.1%
	Resp. sens. equivalent to GHS sub-cat. 1B	≥ 1%
A	Aspiration hazard	≥ 10% **
T (N, I)	Specific target organ toxicity (STOT)	≥ 1%
	STOT equivalent to GHS cat. 2	≥ 10%

* GESAMP/EHS normally adopts a 0.3% limit value, which is accepted by most authorities; GHS specifies values of both 0.1% and 0.3%.

** The mixture must have a kinematic viscosity ≤ 20.5 mm²/s, measured at 40°C.

ANNEX 5

GESAMP HAZARD PROFILES FOR NEW SUBSTANCES SUBMITTED FOR EVALUATION TO GESAMP/EHS 56

1 This annex sets out the GESAMP Hazard Profiles (GHP) assigned for the products submitted to the current session. The respective substances and their GHPs are summarized in the subsequent table.

ANNEX 5 - GESAMP HAZARD PROFILES FOR NEW SUBSTANCES SUBMITTED FOR EVALUATION TO GESAMP/EHS 56

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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 (C3-C11) benzenes with phenol-formaldehyde/acrylate polymers (33% or less) (#)	2517	4	NI	4	NR	2	0	0	0	(2)	(2)	(2)	MASs		F	3
Alkyl (C3-C11) benzenes with phenol-formaldehyde/acrylate polymers (33% or less)	4198	CAS No														
alpha-Olefins (C12+), mixture (#)	2516	(5)	(5)	(5)	(R)	(0)	NI	(0)	(0)	(1)	(1)	(0)	A		Fp	3
alpha-Olefins (C12+), mixture	4197	CAS No														
Sodium oxalate solution (#)	2518	0	(1)	(1)	R	2	1	1	0	(2)	(2)	2			D	2
Sodium oxalate solution	4199	CAS No														

ANNEX 6

UPDATED GESAMP COMPOSITE LIST

Notes:

- 1 In the Composite List, both EHS and TRN (shipping) names are shown for each product. The alphabetical listing of the products is based on the EHS names.
- 2 Any changes introduced in the table since the last issue of the Composite List are highlighted.
- 3 Entries with an EHS name marked with a single asterisk (*) represent cleaning additive components that have only a partial hazard profile assigned. These profiles **cannot be used** for mixture calculations in relation to bulk shipments.
- 4 Entries with an EHS name marked with a double asterisk (**) represent mixture components for which only a partial hazard profile has been assigned. These profiles **may be used** for mixture calculations in relation to bulk shipments.
- 5 Entries with an EHS name marked with a hash mark (#) reflect that for the **C3 rating**, the product, as a vapour rather than an aerosol or mist, could be considered to have a lower inhalation hazard for the purposes of risk management.
- 6 Entries with an EHS name marked with an exclamation mark (!) refer to a mixture that contains components with substantially different physical properties and therefore different physical behaviours when released in the marine environment. The **E2 rating** assigned reflects the most severe impact from an environmental standpoint. For example, a mixture assigned a rating of Fp may also have a major component(s) with sinker characteristics (S) or dissolver characteristics (D).

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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
Acetic acid	13	0	0	0	R	1	NI	1	1	1	3C	3			D	3
Acetic acid	64								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								CAS No		108-24-7					
Acetochlor (ISO)	2047	3	2	2	NR	4	NI	1	0	(1)	0	0			S	2
Acetochlor	66								CAS No		34256-82-1					
Acetone	15	0	0	0	R	0	0	0	0	0	1	2		NT	DE	2
Acetone	67								CAS No		67-64-1					
Acetone cyanohydrin	14	0	0	0	R	4	NI	3	4	3	(3)	(3)			D	3
Acetone cyanohydrin	68								CAS No		75-86-5					
Acetonitrile	16	0	0	0	R	1	NI	1	1	2	1	2			D	2
Acetonitrile	69								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								CAS No							
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								CAS No							
Acrylamide	23	0	0	0	R	2	0	2	2	(2)	1	2	CMNSs		D	3
Acrylamide solution (50% or less)	70								CAS No		79-06-1					
Acrylic acid	24	0	0	0	R	4	NI	2	2	2	3C	3			D	3
Acrylic acid	71								CAS No		79-10-7					
Acrylic acid / dimethyldiallylammonium chloride copolymer, partial sodium salt (MWt 1500-4000, aqueous solution)	2406	0	NI	0	R	0	0	0	0	(0)	0	0			D	0
Acrylic acid / dimethyldiallylammonium chloride copolymer, partial sodium salt (MWt 1500-4000, aqueous solution)	3682								CAS No							
Acrylic acid/ethenesulphonic acid copolymer with phosphonate groups, sodium salt (aqueous solution)	2417	0	NI	0	NR	0	NI	0	(0)	(0)	0	0			D	0
Acrylic acid/ethenesulphonic acid copolymer with phosphonate groups, sodium salt solution	3693								CAS No							
Acrylonitrile	25	0	2	2	NR	3	0	2	3	3	2	2	CMSs	NT	DE	3
Acrylonitrile	72								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								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
Adiponitrile	26	0	0	0	R	1	NI	3	(3)	3	3	(3)			FD	3
Adiponitrile	74								CAS No		111-69-3					
Alachlor (ISO)	1488	3	3	3	NI	4	1	1	0	(2)	1	0	CSs		S	3
Alachlor technical (90% or more)	75								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								CAS No							
Alcoholic silicasol	2198	0	0	0	R	0	0	0	0	0	1	2			DE	2
Tetraethyl silicate monomer/oligomer (20% in ethanol)	2475								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								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								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								CAS No							
Alcohol (C10-C18) poly (7) ethoxylate (#)	2488	NI	(3)	(3)	R	3	1	(1)	(0)	(2)	(2)	(2)			D	2
Alcohol (C10-C18) poly (7) ethoxylate	3979								CAS No		85422-93-1					
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								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								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								CAS No							
Alcohol(C12-C14)poly(2)ethoxylate sulphate, sodium salt (*)	2419	2	NI	2	R	3	NI	NI	NI	NI	NI	NI			NI	NI
	3695								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								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								CAS No							
Alcohols, C10-C16 ethoxylated propoxylated (*)	2450	0	NI	0	R	3	NI	NI	NI	NI	NI	NI			NI	NI
	3868								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
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									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									CAS No						
Alcohols, linear (C10-C14)	2365	(5)	(2)	(2)	(R)	(4)	(1)	0	0	(2)	(2)	(2)			Fp	2
Decyl/Dodecyl/Tetradecyl alcohol mixture	3128									CAS No						
Alkanes (C6-C9)	2202	(5)	NI	(5)	(R)	(4)	NI	(0)	(0)	(1)	(2)	(2)	N		FE	2
Alkanes (C6-C9)	88									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									CAS No						
Iso-and cyclo-alkanes (C12+)	2204	(5)	NI	(5)	NI	(0)	NI	0	0	(1)	(0)	(0)	A		NI	2
Iso- and cyclo-alkanes (C12+)	394									CAS No						
n-Alkanes (C9-C11)	2449	(5)	NI	(5)	R	0	(0)	0	0	(0)	1	0	A		F	3
n-Alkanes (C9-C11)	3884									CAS No						
n-Alkanes (C10-C20)	296	(5)	(5)	(5)	(R)	(0)	NI	(0)	(0)	(0)	(1)	(1)	A		Fp	3
n-Alkanes (C10-C20)	471									CAS No						
Alkane (C14-C17) sulphonic acid, sodium salt (60-65% solution)	334	2	2	2	R	3	1	0	0	(2)	2	2			D	2
Sodium alkyl (C14-C17) sulphonates (60-65% solution)	1153									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									CAS No						
Alkenoic acid ester, borated	2376	5	(3)	(3)	R	2	NI	0	0	(2)	2	0			Fp	2
	3153									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									CAS No						
Alkenyl succinic anhydride	298	0	0	0	NR	1	NI	0	0	(2)	2	(2)	SsSr		FD	2
Alkenyl (C16-C20) succinic anhydride	2336									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									CAS No						
Alkyl/cyclo(C4-C5)alcohols	2447	(1)	(1)	(1)	(R)	(2)	(0)	(1)	(1)	(2)	(2)	(3)			FED	3
Alkyl/cyclo (C4-C5) alcohols	3962									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/cyclo(C4-C5)alcohols	2447 3825	(1)	(1)	(1)	(R)	(2)	(0)	(1)	(1)	(2)	(2)	(3)			FED	3
		CAS No														
Alkyl amine, alkenyl acid ester, mixture	1433 98	NI	NI	NI	NI	1	NI	(0)	(0)	NI	NI	NI			Fp	2
		CAS No														
Alkylaryl phosphate mixtures (more than 40% Diphenyl tolyl phosphate, less than 0.02% ortho-isomers)	2267 280	4	4	4	R	4	4	0	0	(1)	1	0			S	1
		CAS No														
Alkylated phenols (C4-C9)	2273 2575	0	2	0	NR	1	0	1	0	(2)	1	1			Fp	2
		CAS No														
Alkylbenzene distillation bottoms	300 3106	0	2	2	NR	0	(3)	0	0	1	1	1			Fp	2
		CAS No														
Alkyl (C12-C15) benzene/indane/indene mixture	1872 103	0	4	4	NR	0	NI	0	0	0	0	2			FE	2
		CAS No														
Alkylbenzene, alkylindane, alkylindene mixture (each C12-C17)	2303 2909	(2)	(2)	(2)	(R)	(3)	(0)	0	0	(2)	2	2	ACMNR		FE	3
		CAS No														
Alkyl (C3-C4) benzenes	2206 91	(3)	NI	(3)	R	4	NI	0	0	(2)	(2)	(1)			FE	2
		CAS No														
Alkyl (C5-C8) benzenes	2207 92	5	4	4	(NR)	4	NI	0	0	(2)	(2)	(1)			F	2
		CAS No														
Alkyl benzenes, C9-C17 (straight or branched)	1783 100	0	4	4	NR	1	NI	0	(0)	(1)	(1)	(1)			F	1
		CAS No														
Alkylbenzenes mixture (containing less than 1% naphthalene)	2423 3600	3	3	3	NR	4	NI	0	0	(2)	2	1	A		F	3
		CAS No														
Alkylbenzenes mixtures (containing naphthalene)	2424 3698	(3)	(3)	(3)	(NR)	(4)	NI	0	0	(1)	1	1	A		F	3
		CAS No														
Alkylbenzenes mixtures (containing naphthalene)	2424 3966	(3)	(3)	(3)	(NR)	(4)	NI	0	0	(1)	1	1	A		F	3
		CAS No														
Alkyl(C11-C13)benzenesulphonates, straight chain	301 102	3	3	3	R	3	1	1	(1)	(3)	2	3			FD	3
		CAS No														
Alkylbenzene sulphonic acid, sodium salt solution													42615-29-2			
Alkyl (C3-C11) benzenes with phenol-formaldehyde/acrylate polymers (33% or less) (#)	2517	4	NI	4	NR	2	0	0	0	(2)	(2)	(2)	MASs		F	3
	4198	CAS No														

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Alkyl(branched C10-C18, C12 rich)phenols	2504	0	4	4	NR	5	3	0	0	(3)	3	3	R		Fp	3
Alkylphenols (C10-C18, C12 rich)	4070									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									CAS No						
Alkyl dithio thiadiazole (C6-C24) (LOA)	1981	5	NI	5	NR	1	NI	0	0	(0)	0	0			S	2
Alkyl dithiothiadiazole (C6-C24)	104									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									CAS No						
Alkyl naphthalenes, crude (containing less than 1% naphthalene)	2425	4	4	4	R	4	NI	0	0	(1)	1	1	AC		F	3
Alkyl naphthalenes (containing less than 1% naphthalene), crude	3601									CAS No						
Alkyl naphthalenes, crude (containing naphthalene)	2426	(4)	(4)	(4)	(R)	(4)	NI	0	0	(1)	1	1	AC		F	3
Alkyl naphthalenes (containing naphthalenes), crude	3699									CAS No						
Alkyl (C7-C9) nitrates	8	4	NI	4	NR	3	NI	0	0	(3)	2	(3)			F	3
Alkyl (C7-C9) nitrates	93									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									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									CAS No						
Alkyl (C9-C15) phenyl propoxylate	2188	0	NI	0	NR	0	NI	0	0	(2)	2	2			FD	2
Alkyl (C9-C15) phenyl propoxylate	2430									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									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									CAS No	141464-42-8					
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									CAS No	68515-73-1					
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									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									CAS No	110615-47-9					

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Alkyl (C10-C15, C12 rich) phenol poly(4-12)ethoxylate (#)	2480	(5)	(4)	(4)	(NR)	(2)	NI	(0)	(0)	(2)	(2)	(1)			SD	2			
Alkyl (C10-C15, C12 rich) phenol poly(4-12)ethoxylate	3953								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								CAS No								91082-17-6		
Alkyltoluenes	2374	0	2	2	NR	0	NI	0	(0)	(1)	0	1			Fp	2			
Alkyl (C18+) toluenes	3148								CAS No										
Alkyl(C18-C28)toluenesulphonic acid (>90% in mineral oil)	2429	0	4	4	NR	3	NI	0	0	(3)	2	3	Ss		Fp	3			
Alkyl(C18-C28)toluenesulphonic acid	3658								CAS No										
Alkyl(C18-C28)toluenesulphonic acid, calcium salts, borated (up to 70% in mineral oil)	2404	0	4	4	NR	0	NI	(0)	(0)	(1)	(1)	(1)	Ss		S	2			
Alkyl(C18-C28)toluenesulphonic acid, calcium salts, borated	3661								CAS No										
Alkyl(C18-C28)toluenesulphonic acid, calcium salts, high overbase (up to 70% in mineral oil)	2373	(0)	(4)	(4)	(NR)	(0)	NI	0	0	(0)	0	0	Ss		S	2			
Alkyl (C18-C28) toluenesulphonic acid, calcium salts, high overbase	3149								CAS No										
Alkyl(C18-C28)toluenesulphonic acid, calcium salts, low overbase (up to 60% in mineral oil)	2409	0	4	4	NR	0	NI	0	0	(2)	2	0	Ss		Fp	3			
Alkyl (C18-C28) toluenesulphonic acid, calcium salts, low overbase	3685								CAS No										
Allyl alcohol	28	0	0	0	R	4	NI	2	3	3	2	3	A		D	3			
Allyl alcohol	105								CAS No								107-18-6		
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								CAS No										
Aluminium hydroxide, sodium hydroxide, sodium carbonate solution (40% or less)	2438	Inorg	0	0	Inorg	3	NI	0	0	(3)	3B	(3)			D	3			
Aluminium hydroxide, sodium hydroxide, sodium carbonate solution (40% or less)	3807								CAS No										
Aluminium sulphate solution	2205	Inorg	Inorg	2	Inorg	3	1	1	(0)	(3)	(2)	(3)			D	3			
Aluminium sulphate solution	111								CAS No										
Amides, coco, N-[3-(dibutylamino) propyl], acrylates	2513	(4)	NI	(4)	NR	4	NI	0	0	(2)	2	2			Fp	2			
	4162								CAS No								851545-09-0		
2-(2-Aminoethoxy) ethanol	75	0	0	0	NR	1	0	0	1	(3)	3	3			D	3			
2-(2-Aminoethoxy) ethanol	37								CAS No								929-06-6		
Aminoethylethanolamine	68	0	0	0	NR	1	0	0	0	(3)	3B	2	SsSr		D	3			
Aminoethyl ethanolamine	112								CAS No								111-41-1		
Aminoethylethanolamine/Aminoethyldiethanolamine solution	74	Inorg	0	0	NR	1	0	(0)	(0)	(3)	(3B)	(2)	SsSr		D	3			
Aminoethyldiethanolamine/Aminoethylethanolamine solution	113								CAS No										

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N-Aminoethylpiperazine	88	0	0	0	NR	1	NI	0	2	(3)	3	3	Ss		D	3
N-Aminoethylpiperazine	472								CAS No		140-31-8					
2-Amino-2-(hydroxymethyl)-1,3-propanediol solution(40% or less)	89	0	NI	0	NI	1	NI	0	0	NI	NI	NI			D	NI
2-Amino-2-hydroxymethyl-1,3-propanediol solution (40% or less)	38								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								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								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								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%) (*)	3411								CAS No		12125-02-9					
Ammonium lignosulphonate (46% solution in water)	2086	0	NI	0	NR	0	NI	0	(0)	(0)	0	0			D	0
Ammonium lignosulphonate solutions	118								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								CAS No							
Ammonium polyphosphate solution	1764	Inorg	0	0	Inorg	1	NI	0	0	0	1	0			D	1
Ammonium polyphosphate solution	120								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								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								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								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								CAS No		7783-18-8					
Amyl acetate	255	2	2	2	NR	2	NI	0	(0)	0	1	1		NT	FED	2
Amyl acetate (all isomers)	125								CAS No		628-63-7					
tert-Amyl ethyl ether	2428	3	NI	3	NR	1	NI	0	(0)	0	2	2			E	2
tert-Amyl ethyl ether	3623								CAS No							

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tert-Amyl methyl ether	2141	1	NI	1	NI	4	NI	1	0	2	0	1			ED	2			
tert-Amyl methyl ether	2210								CAS No										
Amyl propionate	1484	2	NI	2	R	2	NI	0	0	(2)	2	1			F	2			
n-Pentyl propionate	484								CAS No								624-54-4		
Aniline	261	0	0	0	R	3	2	2	2	3	1	3	CTSs	NT	FD	3			
Aniline	127								CAS No								62-53-3		
Apple juice	275	0	NI	0	R	0	0	0	0	0	0	0			D	0			
Apple juice	130								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								CAS No										
L-Aspartic acid, homopolymer, sodium salt (aqueous solution)	2421	0	0	0	NR	0	NI	0	(0)	0	0	0			D	0			
L-Aspartic acid, homopolymer, sodium salt (aqueous solution)	3697								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								CAS No										
Aziridine polymer with methyloxirane (78% in diethylene glycol monoethyl ether)	2436	0	NI	0	NR	2	0	0	0	0	1	0			Fp	2			
Aziridine polymer with methyloxirane (78% in diethylene glycol monoethyl ether)	3751								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								CAS No										
Benzaldehyde	2498	1	NI	1	R	3	NI	1	(1)	2	2	2			FD	2			
Benzaldehyde	4132								CAS No								100-52-7		
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								CAS No								71-43-2		
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			
Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl), 4-hydroxy-C7-C9 alcohols branched and linear	3405								CAS No										
Benzene sulphonyl chloride	320	1	1	1	R	3	NI	1	(2)	(3)	3	3	Ss		SD	3			
Benzene sulphonyl chloride	134								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								CAS No										
Benzyl acetate	348	1	NI	1	R	3	1	1	0	2	1	1			SD	2			
Benzyl acetate	138								CAS No								140-11-4		

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Benzyl alcohol	349	1	NI	1	R	2	NI	1	1	2	2	2			SD	2
Benzyl alcohol	139								CAS No		100-51-6					
Benzyl chloride	352	NI	1	1	R	3	1	1	(2)	3	3	3	CSsA		S	3
Benzyl chloride	140								CAS No		100-44-7					
Bis(2-ethylhexyl) terephthalate	2437	0	3	3	R	0	0	0	0	(1)	1	1			Fp	2
Bis(2-ethylhexyl) terephthalate	3752								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								CAS No							
Bismuth oxide	2483	Inorg	(0)	(0)	Inorg	(0)	(0)	0	(0)	0	0	0			S	0
Bismuth oxide	4059								CAS No		1304-76-3					
Bis[3-(triethoxysilyl)propyl]amine	2444	1	NI	1	R	1	NI	0	0	(2)	2	2			D	2
Bis[3-(triethoxysilyl)propyl]amine	3823								CAS No		13497-18-2					
Borax, anhydrous or hydrated, crude or refined	359	Inorg	0	0	Inorg	1	0	0	0	(1)	1	1	R		S	3
Borax	143								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								CAS No		10043-35-3					
Bromochloromethane	2084	1	1	1	NR	1	NI	0	0	0	1	0			SD	1
Bromochloromethane	145								CAS No		74-97-5					
1-Bromopropane	2229	2	NI	2	NI	NI	NI	0	(0)	0	(2)	(2)			SD	2
1-Bromopropane	2696								CAS No							
Butanol	381	0	(0)	0	R	0	NI	0	0	0	2	3		NT	D	3
n-Butyl alcohol	474								CAS No		71-36-3					
Butanol	381	0	(0)	0	R	0	NI	0	0	0	2	3		NT	D	3
Butyl alcohol (all isomers)	2216								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								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								CAS No		75-65-0					
2-Butanone	385	0	NI	0	R	1	0	0	0	1	2	2			DE	2
Methyl ethyl ketone	446								CAS No		78-93-3					

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Butene oligomer	386	0	NI	0	NR	(4)	0	0	0	0	0	1			FE	2
Butene oligomer	146								CAS No							
2-Butoxyethanol/hyperbranched polyesteramide mixture	2446	NI	NI	(0)	NR	(2)	NI	1	2	2	1	2			D	2
2-Butoxyethanol (58%)/Hyperbranched polyesteramide (42%) (mixture)	3901								CAS No							
Butyl acetate	387	1	NI	1	R	2	NI	0	0	0	0	1			FED	2
Butyl acetate (all isomers)	147								CAS No		123-86-4					
Butyl acrylate	390	2	NI	2	R	3	NI	1	1	1	2	2	SsA		FED	2
Butyl acrylate (all isomers)	148								CAS No		141-32-2					
Butylamine	392	0	NI	0	R	2	NI	2	2	3	3C	3			DE	3
Butylamine (all isomers)	154								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								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								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								CAS No		109-21-7					
Butyl/Decyl/Cetyl/Eicosyl methacrylate mixture	2295	(5)	NI	(5)	(R)	(3)	NI	0	0	0	2	2	Ss		FE	2
Butyl/Decyl/Cetyl/Eicosyl methacrylate mixture	153								CAS No							
Butylene glycol(s)	402	0	NI	0	R	1	NI	1	0	0	0	0			D	1
Butylene glycol	156								CAS No		110-63-4					
Butylene glycol methyl ether acetate	953	1	1	1	R	3	NI	0	(0)	(1)	1	1			FED	1
3-Methoxybutyl acetate	58								CAS No		4435-53-4					
Butylene glycol monomethyl ether	952	0	NI	0	R	1	NI	0	0	(1)	0	1			D	1
3-Methoxy-1-butanol	57								CAS No		2517-43-3					
1,2-Butylene oxide	403	0	NI	0	NR	2	NI	1	1	2	2	2	C		DE	3
1,2-Butylene oxide	8								CAS No		106-88-7					
Butyl methacrylate	409	2	NI	2	NR	1	NI	0	0	0	2	2	Ss		FE	2
Butyl methacrylate	151								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								CAS No		84-78-6					

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Butyl phosphate/dibutyl phosphate mixture	2434	2	NI	2	R	1	0	0	(0)	(3)	2	3			D	3
Butyl phosphate/dibutyl phosphate mixture	3749								CAS No							
Butyl propionate	1483	2	NI	2	R	2	NI	0	0	0	1	1			FED	2
n-Butyl propionate	476								CAS No		590-01-2					
1-Butylpyrrolidin-2-one	2490	1	(1)	1	R	1	0	1	0	0	1	2			D	2
	4124								CAS No		3470-98-2					
Butyl stearate	413	0	NI	0	(R)	0	NI	0	NI	NI	2	NI			Fp	2
Butyl stearate	152								CAS No		123-95-5					
Butyraldehyde	416	1	NI	1	R	2	0	0	1	0	3	3			DE	3
Butyraldehyde (all isomers)	157								CAS No		123-72-8					
Butyric acid	418	0	NI	0	R	2	0	0	0	0	3A	3			D	3
Butyric acid	158								CAS No		107-92-6					
Butyrolactone	420	0	NI	0	R	(3)	NI	1	(0)	0	0	1	C		D	3
gamma-Butyrolactone	360								CAS No		96-48-0					
Calcium alkyl (long chain) salicylate (overbased) in mineral oil (LOA)	70	0	NI	0	NR	2	NI	0	0	(1)	(1)	(1)	Ss		Fp	3
Calcium long-chain alkyl salicylate (C13+)	166								CAS No							
Calcium alkyl phenol sulphide,polyolefin phosphorusulphide mixture (LOA)	1435	NI	NI	NI	NR	4	NI	0	0	(0)	NI	NI			NI	NI
Calcium alkyl (C9) phenol sulphide/Polyolefin phosphorusulphide mixture	160								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								CAS No							
Calcium bromide (solutions)	427	Inorg	NI	0	Inorg	0	0	(0)	(0)	(2)	(1)	(2)			D	2
Drilling brines (containing calcium bromide)	308								CAS No		7789-41-5					
Calcium carbonate slurry	2016	Inorg	0	0	Inorg	0	NI	0	(0)	(0)	0	0			S	0
Calcium carbonate slurry	161								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								CAS No		1305-62-0					
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								CAS No		7778-54-3					
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								CAS No		7778-54-3					

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Calcium lignosulphonate (52% solution in water)	2087	0	NI	0	NR	0	NI	0	(0)	(0)	0	0			D	0
Calcium lignosulphonate solutions	165								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			FD	1
Calcium alkaryl sulphonate (C11-C50)	169								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								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								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								CAS No							
Calcium long-chain alkyl phenolic amine (C8-C40)	1728	NI	NI	NI	NR	0	NI	0	0	(1)	1	(1)			Fp	2
	171								CAS No							
Calcium long-chain alkyl (C18-C28) salicylate	2383	0	NI	0	NR	0	NI	0	0	(1)	1	0	Ss		Fp	3
Calcium long-chain alkyl (C18-C28) salicylate	3426								CAS No							
Calcium nitrate	1803	Inorg	0	0	Inorg	0	NI	0	(0)	(1)	1	1			D	1
Calcium nitrate solutions (50% or less)	172								CAS No		10124-37-5					
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								CAS No							
Camelina oil	2440	(0)	NI	(0)	(R)	(0)	(0)	(0)	(0)	(1)	(0)	(1)			Fp	2
Camelina oil	3767								CAS No		68956-68-3					
Camphor oil, white	1897	NI	NI	NI	NI	NI	NI	2	NI	(2)	1	NI		(T)	FE	2
Camphor oil	174								CAS No		8008-51-3					
Caprolactam	436	0	NI	0	R	1	0	1	1	2	1	2			D	3
epsilon-Caprolactam (molten or aqueous solutions)	310								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								CAS No							
Carbon disulphide	439	2	1	1	NR	3	NI	2	(3)	4	3A	3	RN		SD	3
Carbon disulphide	177								CAS No		75-15-0					
Cashew nut shell oil (untreated)	443	0	NI	0	R	0	NI	(0)	(0)	(2)	2	(2)	Ss		Fp	3
Cashew nut shell oil (untreated)	179								CAS No							

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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									CAS No						
Cesium Formate, drilling brines	2384	0	3	3	Inorg	2	NI	1	0	(2)	2	2			D	2
Cesium formate solution (*)	3421									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									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									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									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									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									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									CAS No			79-11-8			
Chlorobenzene	456	2	2	2	NR	3	0	1	0	2	2	0			S	2
Chlorobenzene	185									CAS No			108-90-7			
Chlorohydrins	463	0	NI	0	R	0	NI	(2)	(2)	(3)	(3A)	3	C		D	3
Chlorohydrins (crude)	187									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)	C		D	3
N-(3-Chloro-2-hydroxypropyl)trimethyl ammonium chloride solution (75% or less)	2579									CAS No						
4-Chloro-2-methylphenoxyacetic acid, dimethylamine salt solution	1536	2	NI	2	NI	2	NI	1	0	2	1	1			S	2
4-Chloro-2-methylphenoxyacetic acid, dimethylamine salt solution	62									CAS No						
Chloronitrobenzenes	467	2	2	2	NR	3	NI	2	2	2	1	1			S	2
o-Chloronitrobenzene	533									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									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									CAS No			598-78-7			

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3-Chloropropylene	478	1	1	1	R	3	NI	1	0	2	1	3	T		E	3
Allyl chloride	106								CAS No		107-05-1					
Chlorosulphonic acid	479	Inorg	0	0	Inorg	2	NI	(2)	(3)	4	3C	3			D	3
Chlorosulphonic acid	188								CAS No		7790-94-5					
m-Chlorotoluene	481	3	NI	3	NR	2	NI	2	0	(2)	1	1			S	2
m-Chlorotoluene	426								CAS No		108-41-8					
o-Chlorotoluene	480	3	3	3	NR	3	1	0	0	0	1	1			S	1
Chlorotoluenes (mixed isomers)	189								CAS No		95-49-8					
o-Chlorotoluene	480	3	3	3	NR	3	1	0	0	0	1	1			S	1
o-Chlorotoluene	534								CAS No		95-49-8					
p-Chlorotoluene	482	3	3	3	NR	3	0	0	0	0	1	1			S	2
p-Chlorotoluene	551								CAS No		106-43-4					
Choline chloride, solutions	485	0	NI	0	R	1	NI	0	(0)	(0)	0	0			D	0
Choline chloride solutions	190								CAS No		67-48-1					
Cinnamaldehyde	2485	1	(2)	(2)	R	2	0	1	1	(2)	2	1	Ss		SD	2
Cinnamaldehyde	4061								CAS No		104-55-2					
Citric acid	493	0	NI	0	R	1	0	0	(0)	(3)	1	3			D	3
Citric acid (70% or less)	748								CAS No		77-92-9					
Citric juices	494	0	0	0	Inorg	0	0	0	0	0	0	0			D	0
Water	740								CAS No							
Clay	495	Inorg	0	0	Inorg	0	0	0	0	0	0	0			S	0
Clay slurry	191								CAS No							
Coal slurry	498	Inorg	0	0	Inorg	0	0	0	0	0	0	0			S	0
Coal slurry	192								CAS No							
Coal tar	499	(4)	4	4	NR	3	1	0	0	0	2	2	CMR	(T)	S	3
Coal tar	193								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								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								CAS No		65996-93-2					

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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								CAS No									
Cocoa butter	2342	0	NI	0	R	0	NI	(0)	(0)	(1)	(0)	(1)			Fp	2		
Cocoa butter	3096								CAS No									
Coconut acid oil	2370	0	0	0	R	3	NI	(0)	(0)	(1)	(1)	(1)			Fp	2		
Coconut acid oil	3139								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								CAS No									
Coconut oil	503	0	NI	0	R	1	NI	0	(0)	(1)	0	(1)			Fp	2		
Coconut oil	2772								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								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								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								CAS No									
Corn oil	521	0	NI	0	R	(2)	NI	0	(0)	(1)	1	1			Fp	2		
Corn Oil	2781								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								CAS No								8001-29-4	
Creosote (coal tar)	524	(4)	(4)	(4)	NR	4	(2)	1	0	2	2	1	CMRSs	(T)	S	3		
Creosote (coal tar)	199								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								CAS No								8021-39-4	
Creosote (coal tar) C8-C22, MW 116-278	2514	NI	(3)	(3)	(NR)	4	1	1	0	(2)	2	1	CMRSs		S	3		
Creosote (coal tar) (C8-C22, MW 116-278)	4163								CAS No									
Cresol/Phenol/Xylenol mixture	2471	(2)	(2)	(2)	R	(3)	(1)	1	2	3	3B	3			SD	3		
Cresol/Phenol/Xylenol mixture	4021								CAS No									
Cresols (mixed isomers)	527	2	2	2	R	3	(1)	2	2	4	3A	3		T	SD	3		
Cresols (all isomers)	201								CAS No								1319-77-3	

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Cresylic acids, dephenolized	1875	2	2	2	R	3	0	(2)	(2)	(3)	(3A)	(3)		(T)	S	3		
Cresylic acid, dephenolized	202								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								CAS No									
Crotonaldehyde	528	0	NI	0	NR	4	1	2	4	4	2	3			D	3		
Crotonaldehyde	204								CAS No								4170-30-3	
Crude Piperazine	2331	0	NI	0	R	2	NI	(1)	(2)	(3)	3	3	SsSr		D	3		
Crude Piperazine	2810								CAS No									
Crude Tall Oil	2357	4	NI	4	R	2	0	0	0	(0)	0	0	Ss		Fp	3		
Tall oil, crude	3118								CAS No									
1,5,9-Cyclododecatriene	534	5	5	5	NR	4	NI	0	0	1	2	1	A		F	3		
1,5,9-Cyclododecatriene	17								CAS No								4904-61-4	
Cycloheptane	535	4	NI	4	(NR)	4	NI	(0)	0	(1)	(0)	(1)			FE	2		
Cycloheptane	205								CAS No								291-64-5	
Cyclohexane	536	3	3	3	NR	3	NI	0	0	1	0	1			E	2		
Cyclohexane	206								CAS No								110-82-7	
Cyclohexane-1,2-dicarboxylic acid, diisononyl ester	2472	0	3	3	R	0	0	0	0	(1)	1	0			Fp	2		
Cyclohexane-1,2-dicarboxylic acid, diisononyl ester	3915								CAS No								166412-78-8	
Cyclohexane oxidation products, sodium salts solution	2458	0	NI	0	Inorg	1	0	0	(0)	(0)	0	0			D	0		
Cyclohexane oxidation products, sodium salts solution	3739								CAS No									
Cyclohexanol	537	1	NI	1	R	2	NI	0	0	0	2	2			Fp	2		
Cyclohexanol	207								CAS No								108-93-0	
Cyclohexanone	539	0	1	1	R	1	0	1	1	1	2	2			FED	2		
Cyclohexanone	208								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								CAS No									
Cyclohexyl acetate	541	2	NI	2	(R)	(2)	NI	0	0	(2)	2	1			FED	2		
Cyclohexyl acetate	210								CAS No								622-45-7	
Cyclohexylamine	542	1	NI	1	R	2	NI	2	2	3	3	3			D	3		
Cyclohexylamine	211								CAS No								108-91-8	

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1,3-Cyclopentadiene dimer (molten)	545	3	3	3	NR	3	NI	2	0	2	2	2			Fp	2
1,3-Cyclopentadiene dimer (molten)	11								CAS No			77-73-6				
Cyclopentane	546	3	NI	3	NR	3	NI	(0)	(0)	0	1	(1)			E	2
Cyclopentane	212								CAS No			287-92-3				
Cyclopentene	547	2	NI	2	(R)	3	NI	1	1	0	(2)	(0)	A		E	2
Cyclopentene	213								CAS No			142-29-0				
Decahydronaphthalene	551	4	4	4	NR	3	NI	0	0	2	2	1			F	1
Decahydronaphthalene	214								CAS No			91-17-8				
Decane	554	5	NI	5	R	0	0	0	0	0	1	0			F	1
Decane	2620								CAS No			124-18-5				
Decanoic acid	555	4	NI	4	R	4	1	0	0	(2)	2	2			Fp	2
Decanoic acid	215								CAS No			334-48-5				
1-Decene	558	5	NI	5	R	4	2	0	0	0	2	0	A		F	3
Decene	216								CAS No			872-05-9				
Decyl acetate	1767	4	NI	4	NI	NI	NI	0	0	(1)	(1)	(1)			F	1
Decyl acetate	217								CAS No			112-17-4				
Decyl acrylate	559	5	NI	5	(R)	5	NI	0	0	(2)	2	1			Fp	2
Decyl acrylate	218								CAS No			2156-96-9				
Decyloxytetrahydrothiophene dioxide	1859	3	NI	3	NR	4	NI	0	0	(1)	1	0			Fp	2
Decyloxytetrahydrothiophene dioxide	220								CAS No							
Dextrose solution	562	0	0	0	R	0	NI	0	0	0	0	(0)			D	0
Glucose solution	361								CAS No			50-99-7				
Dextrose solution	562	0	0	0	R	0	NI	0	0	0	0	(0)			D	0
Dextrose solution	221								CAS No			50-99-7				
Diacetone alcohol	563	0	NI	0	R	1	0	0	0	(2)	2	2			D	2
Diacetone alcohol	226								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								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								CAS No							

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Dialkyl phthalates C9-C13	566	(0)	(4)	(4)	(NR)	(0)	(2)	(0)	(0)	(1)	(1)	(1)	R		Fp	3
Dialkyl (C7-C13) phthalates	227								CAS No							
2,6-Diaminohexanoic acid phosphonate mixed salts solution (#)	2469	1	NI	1	NR	1	(0)	(1)	(1)	(3)	(3)	(3)			D	3
2,6-Diaminohexanoic acid phosphonate mixed salts solution	3989								CAS No							
Diammonium hydrogen phosphate	98	0	0	0	Inorg	1	NI	0	0	(0)	(1)	(1)			D	1
Ammonium hydrogen phosphate solution	117								CAS No			7783-28-0				
Dibromomethane	574	1	NI	1	NR	(2)	NI	1	0	0	(2)	(2)			SD	2
Dibromomethane	228								CAS No			74-95-3				
Di-n-butylamine	577	2	NI	2	R	3	NI	2	2	3	3	3			FD	3
Dibutylamine	231								CAS No			111-92-2				
Di-butyl ether	578	3	3	3	NR	2	NI	0	0	0	1	1			FE	2
n-Butyl ether	475								CAS No			142-96-1				
Dibutyl hydrogen phosphonate	1857	1	NI	1	NI	2	NI	0	0	(3)	3	3			F	3
Dibutyl hydrogen phosphonate	229								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								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								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								CAS No			84-74-2				
Dibutyl terephthalate	2430	5	(3)	(3)	R	4	2	0	0	(0)	0	0			S	0
Dibutyl terephthalate	3596								CAS No							
Dichlorobenzene (all isomers)	333	3	4	4	NR	3	1	1	0	1	(2)	2	CMR	T	S	3
Dichlorobenzene (all isomers)	232								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								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								CAS No			75-34-3				
1,2-Dichloroethane	591	1	1	1	NR	2	0	1	0	2	1	2	C		SD	3
Ethylene dichloride	330								CAS No			107-06-2				

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1,6-Dichlorohexane	593	3	NI	3	NR	3	NI	0	(0)	(0)	0	0			S	0
1,6-Dichlorohexane	19								CAS No							
Dichloromethane	594	1	2	2	NR	1	0	1	0	0	2	2	C		SD	3
Dichloromethane	234								CAS No							
2,4-Dichlorophenol	596	3	2	2	NR	3	2	3	2	3	3	3		T	S	3
2,4-Dichlorophenol	30								CAS No							
2,4-Dichlorophenoxyacetic acid, diethanolamine salt, solution	599	0	1	1	R	2	NI	1	0	(3)	1	3		(T)	D	3
2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution	32								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								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								CAS No							
1,1-Dichloropropane	605	2	1	1	NR	2	1	0	0	1	1	1			SD	1
1,1-Dichloropropane	5								CAS No							
1,2-Dichloropropane	606	2	1	1	NR	2	0	1	0	2	2	2			SD	2
1,2-Dichloropropane	9								CAS No							
1,3-Dichloropropane	607	2	1	1	NR	2	1	0	NI	NI	NI	NI			SD	NI
1,3-Dichloropropane	12								CAS No							
Dichloropropane and dichloropropene, mixture	608	(2)	(1)	(1)	(NR)	(4)	(1)	2	1	2	3	3	CSs		SD	3
Dichloropropene/Dichloropropane mixtures	235								CAS No							
1,3-Dichloropropene	612	1	NI	1	NR	4	1	2	1	2	3	3	CSs		SD	3
1,3-Dichloropropene	13								CAS No							
2,2-Dichloropropionic acid	609	2	2	2	NR	2	NI	1	0	(3)	3	3			D	3
2,2-Dichloropropionic acid	28								CAS No							
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								CAS No							
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								CAS No							
Diethanolamine	620	0	NI	0	R	1	0	1	0	0	2	3	T		D	3
Diethanolamine	236								CAS No							

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Diethylamine	621	0	NI	0	R	2	NI	1	2	3	3C	3			DE	3
Diethylamine	240								CAS No		109-89-7					
2,6-Diethylaniline	1437	3	3	3	NR	2	NI	1	1	(2)	1	2			FD	2
2,6-Diethylaniline	35								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								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								CAS No		84-75-3					
Diethylene glycol	628	0	NI	0	R	0	0	1	0	2	1	1			D	2
Diethylene glycol	243								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								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								CAS No		112-36-7					
Diethylene glycol initiated polyoxypropylene diamine	2353	0	NI	0	NR	2	NI	0	0	(3)	3B	(3)			D	3
Polyetheramine	2946								CAS No							
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								CAS No							
Diethylene glycol phthalate	1438	2	NI	2	NR	1	NI	0	0	(2)	(1)	2			S	2
Diethylene glycol phthalate	247								CAS No							
Diethylene triamine	638	0	1	1	(R)	2	NI	1	3	3	3A	3	Ss		FD	3
Diethylenetriamine	248								CAS No		111-40-0					
Diethylenetriamine pentaacetic acid, pentapotassium salt solution (40%) (**)	2466	1	NI	1	NR	2	NI	NI	NI	NI	NI	NI			D	NI
Diethylenetriamine pentaacetic acid, pentapotassium salt (40% solution)	3929								CAS No							
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								CAS No							
Diethylenetriamine pentamethylene phosphonic acid, pentasodium salt solution (47 %) (**)	2467	0	NI	0	R	2	NI	NI	NI	NI	NI	NI			D	NI
Diethylenetriamine pentamethylene phosphonic acid, pentasodium salt solution	3930								CAS No							
Diethyl ethanolamine	622	0	NI	0	NR	3	NI	1	1	2	3	3			D	3
Diethylaminoethanol	241								CAS No		100-37-8					

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Diethyl ether	640	0	1	1	NR	0	NI	1	0	0	1	1			DE	2
Diethyl ether	237								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								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								CAS No		298-07-7					
Di-(2-ethylhexyl) phthalate	642	0	4	4	R	0	0	0	0	1	1	1	R		Fp	3
Di-(2-ethylhexyl) phthalate	2751								CAS No		117-81-7					
Diethyl phthalate	648	3	3	3	R	2	0	0	0	(1)	1	1			S	1
Diethyl phthalate	238								CAS No		84-66-2					
Diethyl sulphate	649	1	NI	1	R	(2)	NI	1	2	3	2	3	CM		SD	3
Diethyl sulphate	239								CAS No		64-67-5					
Diglycidyl ether of Bisphenol A	653	3	NI	3	NR	4	NI	0	0	(2)	1	2	Ss		S	2
Diglycidyl ether of bisphenol A	250								CAS No		1675-54-3					
Diglycidyl ether of Bisphenol F	728	0	NI	0	NR	3	NI	0	(0)	(2)	1	(2)	SsR		S	3
Diglycidyl ether of bisphenol F	251								CAS No		55492-52-9					
Diheptyl phthalate	655	0	(4)	(4)	R	0	NI	0	0	(1)	1	1			Fp	3
Diheptyl phthalate	252								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								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								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								CAS No							
Diisobutene	575	4	4	4	NR	3	NI	0	0	0	1	0			FE	2
Diisobutylene	257								CAS No		11071-47-9					
Diisobutylamine	576	(2)	NI	(2)	(R)	(3)	NI	2	(2)	2	(3)	(3)			FED	3
Diisobutylamine	256								CAS No		110-96-3					
Diisobutyl ketone	579	3	NI	3	R	2	NI	0	0	2	2	2			F	2
Diisobutyl ketone	254								CAS No		108-83-8					

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Diisobutyl phthalate	581	4	(4)	4	R	(4)	1	0	0	1	0	0	R		S	3
Diisobutyl phthalate	255								CAS No		84-69-5					
Diisodecyl phthalate	619	0	0	0	(R)	0	(0)	0	0	(1)	0	1			Fp	2
Diisodecyl phthalate	3119								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								CAS No							
Diisononyl adipate	690	0	NI	0	R	0	0	0	0	(1)	1	1			Fp	2
Diisononyl adipate	258								CAS No		33703-08-1					
Diisononyl phthalate	691	0	0	0	R	0	0	0	0	(0)	0	0			Fp	2
Diisononyl phthalate	3120								CAS No							
Diisooctyl phthalate	693	0	4	4	(R)	0	0	0	0	(1)	1	0			Fp	2
Diisooctyl phthalate	259								CAS No		27554-26-3					
Diisopropanolamine	703	0	NI	0	NR	1	NI	0	0	0	2	3			FD	3
Diisopropanolamine	260								CAS No		110-97-4					
Diisopropylamine	705	1	NI	1	NR	2	0	1	1	2	3	3			ED	3
Diisopropylamine	261								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								CAS No							
1,3-Diisopropylbenzene	706	5	4	4	NR	4	NI	0	0	2	2	1			F	2
1,3-Diisopropyl benzene	2626								CAS No		25321-09-9					
Diisopropyl ether	711	1	NI	1	NR	2	NI	0	0	0	1	2			E	2
Isopropyl ether	406								CAS No		108-20-3					
Diisopropyl naphthalene, mixed isomers	712	5	4	4	NR	3	NI	0	0	(1)	1	1			Fp	2
Diisopropyl naphthalene	263								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								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								CAS No		127-19-5					
Dimethyl adipate	659	1	NI	1	(R)	4	NI	0	0	(0)	1	1			SD	2
Dimethyl adipate	264								CAS No		627-93-0					

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Dimethylamine (40-50% aq.sol.)	661	0	NI	0	R	3	0	2	0	2	3B	3	Ss	NT	DE	3
Dimethylamine solution (greater than 55% but not greater than 65%)	272								CAS No		124-40-3					
Dimethylamine (40-50% aq.sol.)	661	0	NI	0	R	3	0	2	0	2	3B	3	Ss	NT	DE	3
Dimethylamine solution (greater than 45% but not greater than 55%)	271								CAS No		124-40-3					
Dimethylamine (40-50% aq.sol.)	661	0	NI	0	R	3	0	2	0	2	3B	3	Ss	NT	DE	3
Dimethylamine solution (45% or less)	270								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								CAS No		98-94-2					
Dimethyl disulphide	1616	1	NI	1	NR	3	2	2	0	2	1	1			SD	2
Dimethyl disulphide	2504								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								CAS No		112-18-5					
Dimethylethanolamine	667	0	NI	0	R	2	NI	1	1	2	3	3			D	3
Dimethylethanolamine	273								CAS No		108-01-0					
Dimethyl formamide	676	0	0	0	R	1	0	0	1	2	1	2	R		D	3
Dimethylformamide	274								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								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								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								CAS No		29662-90-6					
Dimethyl phthalate	678	2	2	2	R	2	0	0	0	(1)	0	1			SD	1
Dimethyl phthalate	268								CAS No		131-11-3					
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								CAS No		126-30-7					
Dimethyl succinate	681	0	NI	0	NI	2	NI	0	0	0	0	2			SD	2
Dimethyl succinate	269								CAS No		106-65-0					
Dinitrotoluene	688	2	2	2	NR	4	2	2	(2)	(2)	1	0	CMR		S	3
Dinitrotoluene (molten)	276								CAS No		25321-14-6					

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Dinonyl phthalate	689	0	NI	0	R	0	0	0	0	(1)	1	1			Fp	2
Dinonyl phthalate	2993								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								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								CAS No		123-91-1					
Dipentene	686	4	NI	4	NR	2	NI	0	0	(2)	2	2	Ss		F	3
Dipentene	278								CAS No		138-86-3					
Diphenyl	694	3	4	4	R	4	1	0	0	(1)	0	1			S	1
Diphenyl	279								CAS No		92-52-4					
Diphenylamine (molten)	2186	3	3	3	NR	3	1	0	0	(1)	1	1			S	1
Diphenylamine (molten)	285								CAS No							
Diphenylamine, reaction product with 2,4,4-trimethylpentene	1500	NI	1	1	NR	3	NI	0	0	(1)	1	1			Fp	2
Diphenylamine, reaction product with 2,2,4-Trimethylpentene	286								CAS No							
Diphenylamines, alkylated	1770	5	NI	5	NR	(3)	NI	0	0	(1)	(1)	(1)			F	2
Diphenylamines, alkylated	287								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								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								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								CAS No							
Diphenylmethane-4,4'-diisocyanate (#)	700	5	2	2	NR	0	0	0	0	3	2	2	SsSr		S	3
Diphenylmethane diisocyanate	288								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								CAS No							
Di-n-propylamine	704	1	NI	1	NR	3	NI	2	2	2	3C	3			FED	3
Di-n-propylamine	225								CAS No		142-84-7					
Dipropylene glycol	707	0	1	1	R	0	NI	0	0	0	0	1			D	1
Dipropylene glycol	291								CAS No		25265-71-8					

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Dipropylene glycol dibenzoate	708	3	NI	3	R	3	NI	0	0	0	0	0			S	0
Dipropylene glycol dibenzoate	2431								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								CAS No			131-16-8				
Distilled Resin Oil, DRO	2299	(3)	NI	(3)	(NR)	(3)	NI	0	0	(2)	2	1	MN		FE	3
Resin oil, distilled	2958								CAS No							
Dithiocarbamate ester (C7-C35)	2185	NI	2	2	NR	4	NI	0	0	(1)	1	1			S	1
Dithiocarbamate ester (C7-C35)	2371								CAS No							
Ditridecyl adipate	2351	0	NI	0	NR	0	NI	0	0	(2)	2	1			Fp	2
Ditridecyl adipate	293								CAS No							
Ditridecyl phthalate	714	0	(0)	0	NR	0	(0)	0	0	(1)	1	(1)			Fp	2
Ditridecyl phthalate	2994								CAS No			119-06-2				
Diundecyl phthalate	715	0	(0)	0	NR	0	0	0	0	(1)	1	1			Fp	2
Diundecyl phthalate	294								CAS No			3648-20-2				
Dodecane	718	5	NI	5	(R)	0	NI	0	0	(1)	(1)	(0)			Fp	2
Dodecane (all isomers)	295								CAS No			112-40-3				
tert-Dodecanethiol	2233	5	4	4	NR	0	0	0	0	(2)	2	1	Ss		F	3
tert-Dodecanethiol	2418								CAS No							
1-Dodecanol	719	5	2	2	R	4	1	0	0	(1)	1	(1)			Fp	2
Dodecyl alcohol	298								CAS No			112-53-8				
1-Dodecene (#)	2473	5	NI	5	R	0	NI	0	0	1	1	(0)	A		F	3
1-Dodecene	3990								CAS No			112-41-4				
Dodecene (all isomers) (#)	720	5	NI	5	NR	4	NI	0	0	1	1	0	A		F	3
Dodecene (all isomers)	296								CAS No							
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								CAS No			57195-28-5				
Dodecylamine/Tetradecylamine mixture	721	3	NI	3	R	4	NI	1	0	(3)	3	3			F	3
Dodecylamine/Tetradecylamine mixture	303								CAS No							
Dodecyl benzene	126	0	NI	0	NR	0	3	0	0	(2)	(2)	(1)			F	2
Dodecylbenzene	304								CAS No			123-01-3				

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Dodecyl benzene sulphonic acid (contains 1.5% Sulphuric acid)	1739	NI	NI	3	R	3	1	1	(1)	(2)	(1)	(1)			D	2		
Alkyl (C11-C17) benzene sulphonic acid	101								CAS No									
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								CAS No									
Dodecyl hydroxypropyl sulphide (LOA)	1861	5	NI	5	NI	4	NI	0	0	(0)	0	0			FD	0		
Dodecyl hydroxypropyl sulphide	2252								CAS No									
n-Dodecyl mercaptan	2462	5	3	3	NR	5	NI	0	0	(3)	3	(3)	Ss		F	3		
n-Dodecyl mercaptan	3743								CAS No									
Dodecyl/octadecyl methacrylate (mixtures)	2116	(5)	NI	(5)	(NR)	(0)	NI	0	0	(1)	1	(1)			Fp	2		
Dodecyl/Octadecyl methacrylate mixture	1717								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								CAS No									
Dodecyl phenol	725	0	4	4	NI	4	(3)	0	0	(3)	3	2	R		Fp	3		
Dodecyl phenol	301								CAS No								27193-86-8	
Dodecyl-, Tetradecyl-, Hexadecyl-dimethylamine mixture	2248	3	NI	3	R	5	2	1	(1)	(3)	3C	3			F	3		
Alkyl (C12+) dimethylamine	2485								CAS No									
Dodecylxylene	1763	0	NI	0	NI	0	NI	0	0	(1)	1	1			Fp	2		
Dodecyl Xylene	306								CAS No									
Epichlorohydrin	731	0	0	0	R	2	NI	2	2	3	3A	3	CSs		D	3		
Epichlorohydrin	309								CAS No								106-89-8	
Ethanol	732	0	NI	0	R	0	NI	0	0	0	1	2			D	2		
Ethyl alcohol	315								CAS No								64-17-5	
Ethanolamine	733	0	NI	0	R	2	0	1	1	3	3A	3			D	3		
Ethanolamine	311								CAS No								141-43-5	
Ethanoltriazine (aqueous solution)	2411	(0)	NI	(0)	R	3	NI	1	0	4	0	2	Ss		D	3		
1,3,5-Hexahydrotriethanol-1,3,5-triazine solution	3687								CAS No								4719-04-4	
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								CAS No									
Ethoxylated tallow amine (>95%)	2313	0	NI	0	NR	4	NI	1	(1)	3	2	3	Ss		Fp	3		
Ethoxylated tallow amine (> 95%)	2959								CAS No									

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Ethoxylated tallow amine, glycol mixture	2252	2	NI	2	NR	6	NI	1	0	3	2	3			D	3			
Ethoxylated tallow amine, glycol mixture	2476								CAS No										
Ethyl acetate	735	0	2	2	R	1	0	0	0	1	0	1			DE	2			
Ethyl acetate	312									CAS No								141-78-6	
Ethyl acetoacetate	736	0	0	0	R	1	NI	0	0	(1)	1	1			D	1			
Ethyl acetoacetate	313									CAS No								141-97-9	
Ethyl acrylate	734	1	NI	1	R	3	1	1	2	2	2	2	CSs	T	ED	3			
Ethyl acrylate	314									CAS No								140-88-5	
Ethylamine	1016	0	NI	0	R	2	NI	2	2	1	3	3			GD	3			
Ethylamine	322									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									CAS No									
Ethyl amyl ketone	1784	2	NI	2	NI	2	NI	0	0	(2)	2	NI			FD	2			
Ethyl amyl ketone	316									CAS No								106-68-3	
Ethylbenzene	740	3	2	2	R	3	(1)	0	0	0	2	2	T		FE	3			
Ethylbenzene	324									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									CAS No								13360-63-9	
Ethyl tert-butyl ether (#)	2085	1	NI	1	NR	2	0	0	0	(1)	1	0			E	1			
Ethyl tert-butyl ether	320									CAS No								637-92-3	
Ethyl butyrate	748	1	NI	1	NI	2	NI	0	0	(2)	2	NI			FED	2			
Ethyl butyrate	317									CAS No								105-54-4	
Ethyl cyclohexane	751	4	4	4	NR	3	NI	(0)	(0)	(1)	(1)	(1)			FE	2			
Ethylcyclohexane	325									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									CAS No								5459-93-8	
S-Ethyl dipropylthiocarbamate	2081	3	2	2	NI	3	NI	1	1	2	2	(2)	N		F	3			
S-Ethyl dipropylthiocarbamate	2302									CAS No								759-94-4	
Ethylene carbonate	755	0	NI	0	R	0	NI	0	0	(2)	1	2			SD	2			
Ethylene carbonate	326									CAS No								96-49-1	

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Ethylene chlorohydrin	756	0	0	0	R	3	NI	2	3	4	2	3			D	3
Ethylene chlorohydrin	327								CAS No		107-07-3					
Ethylene cyanohydrin	757	0	0	0	NI	2	NI	1	0	(2)	1	2			D	2
Ethylene cyanohydrin	328								CAS No		109-78-4					
Ethylene diamine	758	0	1	1	R	3	1	1	2	1	3	3	SsSr		D	3
Ethylenediamine	343								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								CAS No		64-02-8					
Ethylene dibromide	760	1	2	2	NR	3	NI	2	2	2	3	3	CRT		SD	3
Ethylene dibromide	329								CAS No		106-93-4					
Ethylene glycol	761	0	NI	0	R	0	NI	1	(1)	(1)	0	0			D	1
Ethylene glycol	331								CAS No		107-21-1					
Ethylene glycol acrylate	869	0	NI	0	R	4	NI	1	3	3	3	3	MSs		D	3
2-Hydroxyethyl acrylate	51								CAS No		818-61-1					
Ethylene glycol butyl ether acetate (#)	764	1	NI	1	R	2	NI	1	1	(1)	1	1			FD	1
Ethylene glycol butyl ether acetate	334								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								CAS No		111-55-7					
Ethylene glycol ethyl ether acetate	767	0	NI	0	R	2	0	1	0	1	1	1	R		D	3
2-Ethoxyethyl acetate	41								CAS No		111-15-9					
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								CAS No		13343-98-1					
Ethylene glycol methyl ether acetate	773	0	NI	0	R	2	NI	0	0	(0)	(1)	1	R		D	3
Ethylene glycol methyl ether acetate	337								CAS No		110-49-6					
Ethylene glycol monoacetate	762	0	NI	0	R	2	NI	0	0	(3)	NI	(3)			D	3
Ethylene glycol acetate	333								CAS No		542-59-6					
Ethylene glycol monoalkyl ethers	2268	0	NI	0	R	2	NI	1	2	2	1	2			D	2
Ethylene glycol monoalkyl ethers	338								CAS No							
Ethylene glycol monoethyl ether	766	0	NI	0	R	0	0	0	0	1	2	2			D	3
2-Ethoxyethanol	40								CAS No		110-80-5					

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Ethylene glycol phenyl ether	775	1	NI	1	R	1	0	1	0	0	1	2			SD	2
Ethylene glycol phenyl ether	339								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								CAS No							
Ethylene glycol (>75%)/Sodium alkyl carboxylates/borax mixture (#)	2477	NI	(1)	(1)	R	1	NI	1	(1)	(2)	(1)	(1)	R		D	3
Ethylene glycol (>75%)/Sodium alkyl carboxylates/borax mixture	4006								CAS No							
Ethylene glycol (>85%)/Sodium alkyl carboxylates mixture (#)	2475	NI	(1)	(1)	R	1	NI	1	(1)	(1)	0	0			D	1
Ethylene glycol (>85%)/Sodium alkyl carboxylates mixture	4005								CAS No							
Ethylene oxide	77	NI	NI	NI	NI	NI	NI	1	(1)	3	3	3	CMR		GD	3
Ethylene oxide	2744								CAS No		75-21-8					
Ethylene-propylene copolymer	1508	NI	NI	NI	NI	NI	NI	(0)	(0)	(0)	(0)	(0)			NI	0
Propylene-Butylene copolymer	633								CAS No							
Ethylene vinyl acetate copolymer (emulsion)	779	0	1	1	NR	0	0	0	(0)	(2)	2	0			S	2
Ethylene-vinyl acetate copolymer (emulsion)	342								CAS No							
Ethyl 3-ethoxypropionate	1439	1	NI	1	NR	2	NI	0	0	0	1	1			FD	1
Ethyl-3-ethoxypropionate	321								CAS No		763-69-9					
2-Ethylhexanoic acid	776	2	NI	2	R	2	NI	0	0	(2)	2	2			FD	3
2-Ethylhexanoic acid	45								CAS No		149-57-5					
2-Ethylhexyl acrylate	782	3	NI	3	R	2	NI	0	0	(2)	2	2	Ss		F	3
2-Ethylhexyl acrylate	46								CAS No		103-11-7					
2-Ethylhexyl esters of fatty acids	2221	0	NI	0	R	1	NI	0	(0)	(0)	1	0			F	1
	2578								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								CAS No							
5-Ethylidene-2-norbornene	783	3	3	3	NR	3	0	0	0	2	1	2			FE	2
Ethylidene norbornene	345								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								CAS No		541-85-5					
Ethyl methacrylate	785	1	NI	1	R	2	0	0	0	0	(2)	(2)	Ss		FE	2
Ethyl methacrylate	318								CAS No		97-63-2					

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N-Ethyl-2-methylamine	2228	0	NI	0	NR	2	NI	3	2	2	3A	3			D	3			
N-Ethylmethylamine	2417								CAS No										
o-Ethyl phenol	788	2	NI	2	NI	(2)	NI	1	NI	NI	NI	NI			S	NI			
o-Ethylphenol	535								CAS No								90-00-6		
Ethyl propionate	790	1	NI	1	NI	2	0	0	(1)	(2)	2	2			ED	2			
Ethyl propionate	319								CAS No								105-37-3		
2-Ethyl-3-propylacrolein	791	2	NI	2	R	3	NI	0	0	1	3	3			F	3			
2-Ethyl-3-propylacrolein	43								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								CAS No										
Fatty acid methyl esters	2362	0	NI	0	R	2	NI	0	(0)	(2)	2	2			Fp	2			
Fatty acid methyl esters (m)	3125								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								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 acid (C8-C16) ethyl hexyl esters	2759								CAS No										
Fatty acids, linear, C8-C18 saturated with C18 unsaturated	2260	(4)	NI	(4)	R	(4)	(1)	(0)	(0)	(1)	(1)	(1)			Fp	2			
Fatty acids, (C8-C18)	2779								CAS No										
Fatty acids, linear C12+ saturated with C12+ unsaturated	2261	5	0	0	(R)	0	NI	(0)	(0)	(1)	(1)	(1)			Fp	2			
Fatty acids, (C12+)	2780								CAS No										
Fatty acids saturated, C8-C10	2324	0	NI	0	R	4	NI	0	0	(3)	3C	3			Fp	3			
Fatty acids, (C8-C10)	3079								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								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								CAS No										
Fatty alcohols, linear, (C16+)	2327	(5)	(2)	(2)	(R)	(0)	(1)	0	0	(1)	1	1			Fp	2			
Alcohols, linear (C16+)	3082								CAS No										
Ferric chloride	339	Inorg	5	5	Inorg	2	0	1	(0)	(3)	2	3			D	3			
Ferric chloride solutions	348								CAS No								7705-08-0		

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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									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									CAS No						
Fish by-products (fresh)	2499	NI	NI	(0)	NR	1	(0)	(0)	(0)	(0)	(0)	(0)			FD	1
	3893									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									CAS No						
Fish protein concentrate (containing 4% or less formic acid)	2502	NI	NI	(0)	R	1	(0)	(0)	(0)	(0)	(1)	(1)			D	1
Fish protein concentrate (containing 4% or less formic acid)	4090									CAS No						
Fish silage (containing 3% or less formic acid with antioxidant)	2500	NI	NI	(0)	R	0	(0)	(0)	(0)	(0)	(1)	(1)			FD	1
	3892									CAS No						
Fish silage protein concentrate (containing 4% or less formic acid)	2487	NI	0	0	R	2	NI	(0)	(0)	(0)	(1)	(1)			D	2
Fish silage protein concentrate (containing 4% or less formic acid)	4062									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									CAS No						
Fluorosilicic acid	806	Inorg	0	0	Inorg	2	NI	2	(2)	4	3	3			D	3
Fluorosilicic acid	2716									CAS No	16961-83-4					
Fluorosilicic acid solution (20-30%)	2240	Inorg	2	2	Inorg	2	0	(1)	(1)	(3)	3B	3	T		D	3
Fluorosilicic acid solution (20-30%)	353									CAS No						
Formaldehyde (37%-50% solution)	807	0	NI	0	R	2	NI	2	2	3	3	3	CMSs	NT	D	3
Formaldehyde solutions (45% or less)	354									CAS No	50-00-0					
Formaldehyde, polymer with isobutyleneated phenol	2377	NI	NI	NI	NR	NI	NI	NI	NI	NI	NI	NI			Fp	NI
Formaldehyde, polymer with isobutyleneated phenol	1203									CAS No						
Formamide	808	0	NI	0	NR	1	NI	0	0	1	1	2	R		D	3
Formamide	355									CAS No	75-12-7					
Formic acid	809	0	NI	0	R	2	NI	1	(1)	2	3C	3			D	3
Formic acid (over 85%)	3830									CAS No	64-18-6					
Formic acid	809	0	NI	0	R	2	NI	1	(1)	2	3C	3			D	3
Formic acid (85% or less acid)	356									CAS No	64-18-6					

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Formic acid mixture (containing up to 18% propionic acid and up to 25% sodium formate)	2408	0	NI	0	R	1	NI	(0)	(0)	(2)	(2)	(3)			D	3		
Formic acid mixture (containing up to 18% propionic acid and up to 25% sodium formate)	3684								CAS No									
Fumaric adduct of rosin (water dispersion)	810	3	NI	3	NR	3	NI	0	(0)	(3)	0	3	Ss		D	3		
Fumaric adduct of rosin, water dispersion	357								CAS No								65997-04-8	
Furfural	812	0	NI	0	R	2	1	2	(2)	3	2	2	C		D	3		
Furfural	358								CAS No								98-01-1	
Furfuryl alcohol	813	0	NI	0	R	1	NI	2	2	3	2	2			D	2		
Furfuryl alcohol	359								CAS No								98-00-0	
Glucitol/glycerol blend propoxylated (containing 10% or more amines)	2441	2	NI	2	NR	1	1	1	0	(2)	(1)	(1)			D	2		
Glucitol/glycerol blend propoxylated (containing 10% or more amines)	3919								CAS No									
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								CAS No									
Glycerine	814	0	NI	0	R	0	0	0	0	(1)	0	1			D	1		
Glycerine	363								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								CAS No									
Glycerol ethoxylated	2360	0	NI	0	R	0	NI	0	0	(0)	0	0			D	0		
Glycerol ethoxylated	3123								CAS No									
Glycerol monooleate	1898	0	0	0	R	0	NI	0	(0)	(1)	1	1			Fp	2		
Glycerol monooleate	365								CAS No								25496-72-4	
Glycerol propoxylated	2346	0	NI	0	NR	1	NI	1	0	(2)	1	0			D	2		
Glycerol propoxylated	3110								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								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								CAS No									
Glycerol/sucrose blend, propoxylated and ethoxylated	2361	0	NI	0	NR	1	NI	0	0	0	0	0			SD	0		
Glycerol/sucrose blend propoxylated and ethoxylated	3124								CAS No									
Glyceryl triacetate	816	0	NI	0	R	1	0	1	0	0	0	1			D	1		
Glyceryl triacetate	367								CAS No								102-76-1	

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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									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									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									CAS No						
Glyoxal solutions (40% or less)	84	0	NI	0	R	1	NI	0	0	2	2	3	MSsSr		D	3
Glyoxal solution (40% or less)	370									CAS No	107-22-2					
Glyoxylic acid	1535	0	NI	0	R	2	0	0	0	(3)	0	3	Ss		D	3
Glyoxylic acid solution (50 % or less)	371									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									CAS No	1071-83-6					
Grape Seed Oil	2442	(0)	NI	(0)	(R)	(0)	(0)	(0)	(0)	(1)	(0)	(1)			Fp	2
Grape Seed Oil	3643									CAS No	8024-22-4					
Groundnut oil	820	0	NI	0	R	(2)	NI	(0)	(0)	(0)	(0)	0			Fp	2
Groundnut oil	2769									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									CAS No	142-82-5					
Heptanoic acid	831	2	NI	2	R	1	NI	0	0	1	3B	(3)			FD	3
n-Heptanoic acid	479									CAS No	111-14-8					
Heptanol (all isomers)	2223	2	NI	2	R	(2)	NI	0	0	(2)	(1)	(2)			FD	2
Heptanol (all isomers) (d)	373									CAS No						
1-Heptanol	828	2	NI	2	R	2	0	1	0	2	(2)	(2)			FD	2
1-Heptanol	2688									CAS No	111-70-6					
Heptene (all isomers)	2225	3	NI	3	NI	2	NI	(0)	(0)	(0)	(2)	(1)			E	2
Heptene (all isomers)	374									CAS No						
1-Heptene	832	3	NI	3	NI	2	NI	(0)	(0)	(0)	(2)	(1)			E	2
1-Heptene	2685									CAS No						
Heptyl acetate	833	3	NI	3	(R)	(3)	NI	0	0	(2)	1	2			F	2
Heptyl acetate	375									CAS No	112-06-1					

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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								CAS No									
Hexahydro-1,3,5-trimethyl-1,3,5-triazine solution (45% or less)	2489	(2)	NI	(2)	R	3	NI	1	(1)	(3)	3A	3	Ss		D	3		
Hexahydro-1,3,5-trimethyl-1,3,5-triazine solution (45% or less)	4123								CAS No			108-74-7						
Hexamethylene diamine	845	0	NI	0	R	2	NI	1	1	(3)	3A	3	R		D	3		
Hexamethylenediamine solution	380								CAS No			124-09-4						
Hexamethylene diamine	845	0	NI	0	R	2	NI	1	1	(3)	3A	3	R		D	3		
Hexamethylenediamine (molten)	378								CAS No			124-09-4						
Hexamethylene diamine	845	0	NI	0	R	2	NI	1	1	(3)	3A	3	R		D	3		
Hexamethylenediamine	377								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								CAS No			3323-53-3						
Hexamethylene diisocyanate	2142	3	0	0	NR	2	NI	1	2	4	3	3	SsSr		S	3		
Hexamethylene diisocyanate	18								CAS No			822-06-0						
Hexamethylene glycol	847	0	NI	0	R	1	NI	0	0	(1)	0	1			D	1		
Hexamethylene glycol	376								CAS No			629-11-8						
Hexamethyleneimine	848	1	NI	1	NI	2	NI	3	1	2	2	2			FED	2		
Hexamethyleneimine	381								CAS No			111-49-9						
Hexamethylene tetramine (40% solution)	849	0	NI	0	R	0	NI	0	0	(1)	0	1	Ss		D	2		
Hexamethylenetetramine solutions	382								CAS No			100-97-0						
Hexane	850	3	NI	3	R	4	NI	0	0	0	2	2	NA		E	2		
Hexane	2683								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								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								CAS No									
Hexanoic acid	853	2	NI	2	R	2	NI	0	0	(3)	(3)	3			FD	3		
Hexanoic acid	384								CAS No			142-62-1						
1-Hexanol	854	1	0	0	(R)	2	NI	1	0	(3)	1	3			FD	3		
Hexanol	385								CAS No			111-27-3						

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Hexene (all isomers)	2224	3	NI	3	R	3	NI	(0)	(0)	(1)	(1)	(1)			E	2
Hexene (all isomers)	386								CAS No							
1-Hexene	855	3	NI	3	R	3	NI	0	0	0	1	1			E	2
1-Hexene	2681								CAS No			592-41-6				
2-Hexene (mixed isomers)	856	3	NI	3	R	3	NI	(0)	(0)	0	(1)	(1)			E	2
2-Hexene (mixed isomers)	2682								CAS No							
Hexyl acetate	857	2	NI	2	NI	3	NI	0	0	(1)	1	1			FE	2
Hexyl acetate	387								CAS No			142-92-7				
sec-Hexyl acetate	858	2	NI	2	NI	3	NI	0	0	0	1	(2)			FED	2
Methylamyl acetate	456								CAS No			108-84-9				
Hexylene glycol	859	0	NI	0	R	0	0	0	0	(3)	2	3			D	2
Hexylene glycol	388								CAS No			107-41-5				
Hydrocarbon wax	2278	(5)	NI	(5)	NR	0	0	(0)	(0)	(0)	(0)	(0)	CT		Fp	3
Hydrocarbon wax	741								CAS No							
Hydrochloric acid	864	Inorg	0	0	Inorg	1	NI	1	1	3	3C	3			DE	3
Hydrochloric acid	389								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								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								CAS No			7722-84-1				
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								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								CAS No							
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								CAS No							
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								CAS No			150-30-0				
[[[2-hydroxyethyl)imino]dimethylene]bisphosphonic acid, sodium salt	2493	0	NI	0	NR	1	NI	0	0	(0)	0	1			D	1
	4127								CAS No			22036-78-8				

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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									CAS No						
lcosa(oxypropane-2,3-diyl)s	2092	NI	NI	NI	NI	NI	NI	0	(0)	(2)	2	(2)			Fp	2
lcosa(oxypropane-2,3-diyl)s	392									CAS No						
lcosa(oxypropane-2,3-diyl)s	2092	NI	NI	NI	NI	NI	NI	0	(0)	(2)	2	(2)			Fp	2
lcosa(oxypropane-2,3-diyl)s	2691									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									CAS No						
Imidazolium compounds, 1-benzyl-4,5-dihydro-1-(hydroxyethyl)-2-norcoco alkyl, chlorides	2505	(0)	NI	(0)	NR	4	NI	NI	NI	NI	(2)	(3)			Fp	3
Imidazolium compounds, 1-benzyl-4,5-dihydro-1-(hydroxyethyl)-2-norcoco alkyl, chlorides	4157									CAS No						
Interesterified Mixed Vegetable Oils	2355	0	NI	0	R	(0)	NI	(0)	(0)	(1)	(1)	(1)			Fp	2
Interesterified vegetable oils	3115									CAS No						
Isobutanol	382	0	NI	0	R	1	0	0	0	1	2	3			D	3
Isobutyl alcohol	397									CAS No						
Isobutyl formate	405	1	NI	1	NI	1	NI	0	(0)	0	(1)	(2)			E	2
Isobutyl formate	398									CAS No						
Isobutyl methacrylate	408	2	NI	2	NR	1	NI	0	0	0	2	2	Ss		FED	2
Isobutyl methacrylate	2673									CAS No						
Isobutyric acid	419	0	NI	0	R	2	NI	2	2	(3)	3	3			E	NI
Isobutyric acid	2459									CAS No						
Isodecanol	557	3	2	2	R	3	NI	0	0	0	2	1			Fp	2
Decyl alcohol (all isomers)	219									CAS No						
Isononanol	1059	3	NI	3	NR	3	1	0	0	(2)	2	2			Fp	2
Nonyl alcohol (all isomers)	510									CAS No						
Isononylaldehyde	2300	3	NI	3	NR	(3)	NI	0	0	(2)	2	1			F	2
Isononylaldehyde	2754									CAS No						
Isooctaldehyde	1071	2	NI	2	NI	3	NI	0	0	(1)	1	1			F	1
Octyl aldehydes	542									CAS No						
Isooctanol	1076	3	NI	3	R	2	0	1	0	(2)	2	(2)			F	2
iso-Octanol	2675									CAS No						

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Isooctylamine	1081	2	NI	2	NI	3	NI	1	1	3	3	3			FD	3
2-Ethylhexylamine	48								CAS No			104-75-6				
Isopentene	1113	2	NI	2	NI	2	NI	(0)	(0)	(0)	(0)	(1)			E	2
iso-Pentene	2677								CAS No			563-45-1				
Isophorone	879	1	1	1	R	2	0	1	1	(2)	1	2			FD	2
Isophorone	399								CAS No			78-59-1				
Isophorone diamine	880	0	0	0	NR	2	0	1	(1)	(3)	3	3	Ss		D	3
Isophoronediamine	401								CAS No			2855-13-2				
Isophorone diisocyanate	881	1	NI	1	NR	3	NI	0	0	3	3	3	SsSr		S	3
Isophorone diisocyanate	400								CAS No			4098-71-9				
Isoprene	882	2	2	2	NR	3	1	0	0	0	1	2	CM		E	3
Isoprene	402								CAS No			78-79-5				
Isopropanol	1181	0	NI	0	R	0	0	0	0	0	1	2			D	2
Isopropyl alcohol	405								CAS No			67-63-0				
Isopropanolamine	1182	0	NI	0	R	2	NI	0	1	0	3	3			D	3
Isopropanolamine	403								CAS No			78-96-6				
Isopropyl acetate	1192	1	NI	1	R	1	NI	0	0	0	1	2			ED	2
Isopropyl acetate	404								CAS No			108-21-4				
Isopropylamine	1195	0	NI	0	R	2	NI	2	2	1	3	3			DE	3
Isopropylamine	407								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								CAS No							
Isopropyl benzene	1197	3	2	2	R	3	NI	0	0	0	2	1			FE	2
Isopropylbenzene	2687								CAS No			98-82-8				
Isopropyl benzene	1197	3	2	2	R	3	NI	0	0	0	2	1			FE	2
Propylbenzene (all isomers)	623								CAS No			98-82-8				
Isopropyl cyclohexane	1199	4	NI	4	(NR)	(3)	NI	(0)	(0)	(1)	(0)	(1)			FE	2
Isopropylcyclohexane	408								CAS No			696-29-7				
Isopropyltoluenes	549	4	4	4	(NR)	3	NI	0	(0)	1	2	(1)			FE	2
p-Cymene	552								CAS No			99-87-6				

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Isovaleraldehyde	1390	1	NI	1	R	3	NI	0	0	0	2	2			D	2
Valeraldehyde (all isomers)	731								CAS No			590-86-3				
Jatropha oil	2402	0	NI	(0)	(R)	(2)	NI	(0)	(0)	(0)	(0)	(0)			Fp	2
Jatropha oil	3637								CAS No							
Kaolin slurry	883	Inorg	NI	0	Inorg	0	NI	0	0	0	0	0			S	0
Kaolin slurry	409								CAS No			1332-58-7				
Lactic acid	886	0	NI	0	R	1	NI	0	0	(3)	2	3			D	3
Lactic acid	410								CAS No			50-21-5				
Lactonitrile solution (80% or less)	887	0	NI	0	R	4	NI	3	4	(4)	NI	NI			D	3
Lactonitrile solution (80% or less)	411								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								CAS No							
Latex, ammonia inhibited	889	0	NI	0	NI	(2)	NI	0	0	(1)	0	1			D	1
Latex, ammonia (1% or less)- inhibited	413								CAS No							
Lauric acid	891	4	NI	4	R	4	1	0	(0)	(2)	1	2			Fp	2
Lauric acid	415								CAS No			143-07-7				
Lauroamidopropyl betaine solution (#)	2479	(4)	(2)	(2)	R	(4)	(1)	(0)	(0)	(3)	(1)	(3)			D	3
	4055								CAS No			4292-10-8				
Lauryl methacrylate	893	0	2	2	R	0	0	0	(0)	(1)	1	1			F	1
Dodecyl methacrylate	300								CAS No			142-90-5				
Lecithin (soybeans)	2146	0	NI	0	R	0	NI	0	0	(0)	0	(0)			SD	0
Lecithin	417								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								CAS No							
Linear alkyl (C12-16) propoxyamine ethoxylate	2380	3	0	3	NR	4	NI	1	(1)	(3)	3	(3)			D	3
Alkyl(C12-C16) propoxyamine ethoxylate	3423								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								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								CAS No							

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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									CAS No						
Long-chain alkylphenate/Phenol sulphide mixture	1754	(0)	NI	(0)	(NR)	0	NI	0	0	(2)	2	2			Fp	2
Long-chain alkylphenate/Phenol sulphide mixture	425									CAS No						
Long chain alkylphenol (C14-C18) (#)	2478	(0)	NI	(0)	NR	(0)	(0)	(0)	(0)	(2)	(2)	(0)			Fp	2
Long-chain alkylphenol (C14-C18)	4029									CAS No						
Long chain alkylphenol (C18-C30) (#)	2476	(0)	NI	(0)	(NR)	(1)	(0)	(0)	(0)	(2)	(2)	(0)			Fp	2
Long-chain alkylphenol (C18-C30)	4040									CAS No						
Long-chain polyetheramine in alkyl(C2-C4)benzenes	1457	NI	NI	NI	NR	2	NI	0	0	(2)	2	2			Fp	2
	422									CAS No						
Lubrizol polyolefin anhydride	1865	0	NI	0	NR	1	NI	0	0	(2)	1	(2)			Fp	2
Polyolefin anhydride	605									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									CAS No						
Magnesium alkyl (long chain) salicylate (overbased) in mineral oil (LOA)	71	(0)	NI	(0)	NR	(2)	NI	0	0	(1)	(1)	(1)	Ss		S	2
Magnesium long-chain alkyl salicylate (C11+)	429									CAS No						
Magnesium chloride	915	Inorg	0	0	Inorg	1	0	0	0	(0)	0	0			D	0
Magnesium chloride solution	427									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									CAS No	1309-42-8					
Magnesium lignosulphonate solutions	2356	(0)	NI	(0)	(NR)	(0)	NI	0	0	(0)	(0)	(0)			D	0
Ligninsulphonic acid, magnesium salt solution	3116									CAS No						
Magnesium long chain alkaryl sulphonate (C11-C50) (LOA)	1967	0	NI	0	NR	0	NI	0	0	(2)	1	2			Fp	2
Magnesium long-chain alkaryl sulphonate (C11-C50)	430									CAS No						
Maleic acid/allyl sulphonic acid copolymer with phosphonate groups, partial sodium salt (aqueous solution)	2412	0	NI	0	NR	0	NI	(0)	(0)	(0)	(0)	(0)			D	0
Maleic acid/allyl sulphonic acid copolymer with phosphonate groups, partial sodium salt (aqueous solution)	3688									CAS No						
Maleic anhydride	921	1	NI	1	R	2	0	1	2	(3)	3	3	SsSr		D	3
Maleic anhydride	431									CAS No	108-31-6					

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Maleic anhydride - sodium allylsulphonate copolymer (aqueous solution)	2410	0	NI	0	NR	1	NI	0	0	(0)	(0)	0			D	0		
Maleic anhydride-sodium allylsulphonate copolymer solution	3686								CAS No									
Maltitol Syrup	2348	0	NI	0	R	0	NI	0	0	(0)	0	0			D	0		
Maltitol solution	3078								CAS No									
Mango kernel 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								CAS No									
2-Mercaptobenzothiazol	925	2	1	1	NR	4	2	0	0	(0)	0	0	Ss		S	2		
Mercaptobenzothiazol, sodium salt solution	432								CAS No								149-30-4	
2-Mercaptoethanol	2495	0	NI	0	NR	1	NI	2	2	2	2	3	SsT		D	3		
	4129								CAS No								60-24-2	
Mesityl oxide	946	1	NI	1	R	(1)	NI	1	0	2	2	2			D	2		
Mesityl oxide	433								CAS No								141-79-7	
Metam-sodium (ISO)	202	0	NI	0	NR	4	NI	1	2	(2)	2	1	Ss		D	2		
Metam sodium solution	434								CAS No								137-42-8	
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 - alkoxy poly (alkylene oxide) methacrylate copolymer, sodium salt aqueous solution (45% or less)	2819								CAS No									
Methacrylic acid, inhibited	948	0	NI	0	R	2	0	1	2	2	3	3			D	3		
Methacrylic acid	435								CAS No								79-41-4	
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								CAS No									
Methacrylonitrile	949	0	NI	0	R	2	0	2	2	3	1	1	Ss	NT	ED	3		
Methacrylonitrile	437								CAS No								126-98-7	
Methanol	951	0	NI	0	R	0	0	(2)	(2)	(2)	2	2	T		DE	3		
Methyl alcohol	441								CAS No								67-56-1	
(2-Methoxymethylethoxy)propanols	2452	0	NI	0	R	0	(0)	0	0	(0)	0	0			D	0		
	3870								CAS No									
Methyl acetate	954	0	NI	0	R	1	NI	0	0	0	1	2			DE	2		
Methyl acetate	438								CAS No								79-20-9	
Methyl acetoacetate	335	0	NI	0	R	1	NI	0	0	(2)	1	2			D	2		
Methyl acetoacetate	439								CAS No								105-45-3	

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Methyl acrylate	955	0	NI	0	R	3	NI	1	1	2	2	3	MSs		D	3
Methyl acrylate	440								CAS No				96-33-3			
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								CAS No				74-89-5			
Methyl amyl alcohol	958	1	NI	1	R	1	NI	1	0	2	1	3			FED	3
Methylamyl alcohol	457								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								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								CAS No				100-61-8			
alpha-Methylbenzyl alcohol with acetophenone (15% or less)	2399	1	NI	1	(R)	(1)	NI	(1)	(0)	(3)	(2)	(3)	R		Fp	3
alpha-Methylbenzyl alcohol with acetophenone (15% or less)	3634								CAS No				98-85-1			
2-Methyl-2-butanol	964	1	1	1	(R)	(1)	0	1	1	1	3	2			D	3
tert-Amyl alcohol	685								CAS No				75-85-4			
3-Methyl-1-butanol	965	1	1	1	(R)	1	0	1	0	(2)	2	2			FED	2
Amyl alcohol, primary	126								CAS No				123-51-3			
3-Methyl-1-butanol	965	1	1	1	(R)	1	0	1	0	(2)	2	2			FED	2
Isoamyl alcohol	396								CAS No				123-51-3			
Methyl butenol	967	0	NI	0	R	2	NI	1	0	(2)	2	2			D	2
Methylbutenol	458								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								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								CAS No				591-78-6			
Methylbutynol	968	0	NI	0	NR	1	NI	1	1	0	0	2			D	2
2-Methyl-2-hydroxy-3-butyne	52								CAS No				115-19-5			
Methylbutynol	968	0	NI	0	NR	1	NI	1	1	0	0	2			D	2
Methylbutynol	459								CAS No				115-19-5			
Methyl butyrate	973	1	NI	1	NI	(2)	NI	0	0	2	2	(2)			ED	2
Methyl butyrate	444								CAS No				623-42-7			

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Methyl cyclohexane	976	3	3	3	NR	3	1	0	0	1	1	1	A		E	2
Methylcyclohexane	460								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								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								CAS No							
N-Methyldiethanolamine	1491	0	NI	0	R	2	NI	1	0	(2)	1	2			D	2
Methyl diethanolamine	445								CAS No				105-59-9			
Methylene dithiocyanate	2235	2	NI	2	NR	5	NI	2	0	4	3	3	Ss		NI	3
Methylene bithiocyanate	2693								CAS No				6317-18-6			
2-Methyl-6-ethylaniline	984	2	NI	2	NR	2	NI	1	1	(2)	0	2			FD	2
2-Methyl-6-ethyl aniline	54								CAS No				24549-06-2			
2-Methyl-5-ethylpyridine	986	2	NI	2	R	2	0	1	2	(3)	3	3			FD	3
2-Methyl-5-ethyl pyridine	53								CAS No				104-90-5			
Methyl formate	987	0	NI	0	R	1	NI	1	0	2	0	2			DE	2
Methyl formate	447								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								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 with 2-Ethylsuccinonitrile (12% or less)	3632								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								CAS No				821-55-6			
Methyl isobutyl ketone	971	1	NI	1	R	1	0	1	0	2	2	3			FED	3
Methyl isobutyl ketone	449								CAS No				108-10-1			
Methyl methacrylate	995	1	NI	1	R	2	NI	0	0	0	2	2	Ss		ED	2
Methyl methacrylate	450								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								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								CAS No							

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Methyl naphthalenes	1999	4	NI	4	(NR)	(4)	NI	1	0	(2)	1	1		T	F	2				
Methyl naphthalene (molten)	451								CAS No											
2-Methyl pentane	1000	3	NI	3	NI	4	NI	(0)	(0)	(2)	(2)	(2)			E	2				
2-Methylpentane	2684								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								CAS No											
Methyl propyl ketone	1003	0	NI	0	(R)	0	NI	1	0	(2)	1	2			FED	2				
Methyl propyl ketone	452								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								CAS No								109-06-8			
3-Methylpyridine	1006	1	NI	1	R	1	NI	1	2	2	3	3			D	3				
3-Methylpyridine	61								CAS No								108-99-6			
4-Methylpyridine	1007	1	NI	1	(R)	1	NI	1	2	2	3	3			D	3				
4-Methylpyridine	63								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								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								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								CAS No								98-83-9			
3-(Methylthio) propionaldehyde	993	0	NI	0	R	3	1	1	1	2	2	3	NSs	T	D	3				
3-(methylthio)propionaldehyde	2368								CAS No								3268-49-3			
Metolachlor (ISO)	113	2	2	2	NR	5	1	1	0	(2)	1	0	Ss		S	2				
N-(2-Methoxy-1-methyl ethyl)-2-ethyl-6-methyl chloroacetanilide	469								CAS No								51218-45-2			
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								CAS No											
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								CAS No											
Molasses	1013	0	NI	0	R	0	NI	0	0	0	0	0			D	0				
Molasses	462								CAS No											

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Molybdenum polysulphide long chain alkyl dithiocarbamide complex	2344	4	2	2	NR	2	0	0	0	(2)	2	2			Fp	2
Molybdenum polysulphide long chain alkyl dithiocarbamide complex	3108									CAS No						
Mononitrobenzene	1017	1	1	1	R	3	(4)	(2)	2	2	1	1	CRT		SD	3
Nitrobenzene	501									CAS No	98-95-3					
Morpholine	1018	0	0	0	R	2	NI	1	2	2	3	3			D	3
Morpholine	463									CAS No	110-91-8					
Myrcene	1019	4	NI	4	R	4	1	0	0	(2)	2	NI			F	2
Myrcene	465									CAS No	123-35-3					
Naphthalene (molten)	1	3	3	3	NR	4	1	1	(0)	(1)	0	0	T	T	S	2
Naphthalene (molten)	493									CAS No	91-20-3					
Naphthalene, crude (molten) (#)(!)	2459	NI	(3)	(3)	NR	3	0	0	(0)	(2)	2	2	CMT		Fp	3
Naphthalene crude (molten)	3858									CAS No	85117-10-8					
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									CAS No	9084-06-4					
Neodecanoic acid	1025	4	NI	4	NR	2	NI	0	0	(2)	0	2			Fp	2
Neodecanoic acid	496									CAS No	26896-20-8					
Nitric acid (90% or less)	1029	Inorg	NI	0	Inorg	2	NI	(3)	(1)	3	3C	3			D	3
Nitric acid (less than 70%)	499									CAS No	7697-37-2					
Nitric acid (90% or less)	1029	Inorg	NI	0	Inorg	2	NI	(3)	(1)	3	3C	3			D	3
Nitric acid (70% and over)	498									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									CAS No	5094-31-3					
Nitroethane	1037	0	NI	0	NR	2	NI	1	0	(2)	(0)	(1)			SD	2
Nitroethane	502									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									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									CAS No						
2-Nitrophenol	1041	1	2	2	R	3	(2)	0	0	(1)	1	1			S	1
o-Nitrophenol (molten)	536									CAS No	88-75-5					

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1-Nitropropane	1044	0	1	1	NR	1	NI	1	0	2	0	1			FED	2
1-Nitropropane	2747								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								CAS No							
2-Nitropropane	1045	0	1	1	NR	2	NI	2	0	2	0	0	C		FED	3
2-Nitropropane	2748								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								CAS No							
o-Nitrotoluene	1049	2	2	2	NR	2	(1)	1	0	(2)	0	1	CMR		S	3
o-Nitrotoluene	2745								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								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								CAS No							
Nonane	1054	4	NI	4	R	4	NI	0	0	1	1	1	A		FE	2
Nonane (all isomers)	506								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								CAS No		112-05-0					
Nonene (all isomers)	2222	4	NI	4	NI	3	NI	0	0	0	1	1	A		FE	2
Nonene (all isomers)	508								CAS No							
1-Nonene	1060	4	NI	4	NI	3	NI	0	0	0	1	1	A		FE	2
1-Nonene	2680								CAS No		27215-95-8					
Nonyl acetate	1766	4	NI	4	NI	NI	NI	0	0	NI	NI	NI			F	NI
Nonyl acetate	509								CAS No		143-13-5					
Nonyl methacrylate monomer	1061	5	NI	5	R	3	NI	(0)	(0)	(1)	(1)	(1)			F	1
Nonyl methacrylate monomer	511								CAS No		2696-43-7					
Nonyl phenol	1062	5	4	4	NR	5	3	1	0	(3)	3	3			Fp	3
Nonylphenol	512								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								CAS No							

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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								CAS No									
Octamethylcyclotetrasiloxane	2398	5	5	5	NR	0	3	0	0	0	0	0			F	1		
Octamethylcyclotetrasiloxane	3633								CAS No									
Octane	1072	5	NI	5	(R)	4	NI	(0)	(0)	0	0	0	A		FE	2		
Octane (all isomers)	538								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								CAS No								124-07-2	
1-Octanol	1075	3	NI	3	R	2	0	1	0	(2)	2	2			Fp	2		
Octanol (all isomers)	540								CAS No								111-87-5	
1-Octanol	1075	3	NI	3	R	2	0	1	0	(2)	2	2			Fp	2		
1-Octanol	2676								CAS No								111-87-5	
Octene (all isomers)	1079	4	NI	4	NR	3	NI	0	0	0	2	1	A		FE	2		
Octene (all isomers)	541								CAS No									
Octyl acetate	1080	3	NI	3	R	2	NI	0	0	(1)	1	NI			FD	1		
n-Octyl acetate	483								CAS No								112-14-1	
Octyl decyl adipate	1082	0	NI	0	(R)	(0)	(0)	(0)	(0)	(1)	(1)	(1)			Fp	2		
Octyl decyl adipate	543								CAS No								110-29-2	
n-Octyl mercaptan	2461	4	3	3	NR	5	NI	1	0	(1)	1	0	Ss		F	3		
n-Octyl mercaptan	3742								CAS No									
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								CAS No									
Olefin mixture (C7-C9)	2385	5	4	4	NR	4	NI	(0)	0	0	2	1	A		E	2		
Olefin mixture (C7-C9) C8 rich, stabilized	3548								CAS No								97593-00-5	
Olefin mixtures (C5-C7)	2243	3	NI	3	R	3	NI	(0)	(0)	(1)	(2)	(1)			E	2		
Olefin mixtures (C5-C7)	545								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								CAS No									
Olefins C13 and above, all isomers (#)	2028	5	NI	5	NR	0	NI	0	0	(1)	(1)	0	A		Fp	3		
Olefins (C13+, all isomers)	547								CAS No									

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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								CAS No									
alpha-Olefins (C12+), mixture (#)	2516	(5)	(5)	(5)	(R)	(0)	NI	(0)	(0)	(1)	(1)	(0)	A		Fp	3		
alpha-Olefins (C12+), mixture	4197								CAS No									
Oleic acid	1089	0	NI	0	R	0	NI	0	1	(2)	1	1			Fp	2		
Oleic acid	548								CAS No								112-80-1	
Oleylamine	1862	0	NI	0	NR	4	NI	1	(1)	(3)	3B	3			Fp	3		
Oleylamine	550								CAS No									
Olive oil	1090	0	NI	0	R	(2)	NI	(0)	(0)	(1)	1	1			Fp	2		
Olive oil	2771								CAS No								8001-25-0	
Orange juice	2375	0	0	0	R	0	0	0	0	(0)	0	0			D	0		
Orange juice	3151								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								CAS No									
Oxatetra-azahydroxyalkanoic acid, substituted with acetic acid / acetoxylethanolamine	2413	1	NI	1	R	1	NI	0	0	0	0	0			D	0		
Oxatetra-azahydroxyalkanoic acid, substituted with acetic acid / acetoxylethanolamine	3689								CAS No									
Oxygenated aliphatic hydrocarbon mixture	2266	5	2	(2)	NR	1	NI	0	0	(1)	1	1			FE	2		
Oxygenated aliphatic hydrocarbon mixture	2825								CAS No									
Palm acid oil	2307	(0)	NI	(0)	(R)	(0)	NI	0	(0)	(1)	0	1			Fp	2		
Palm acid oil	3037								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								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								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		
Palm kernel olein	3038								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								CAS No									
Palm Mid Fraction	2363	(0)	NI	(0)	(R)	(0)	NI	0	0	(0)	(0)	(0)			Fp	2		
Palm mid-fraction	3126								CAS No									

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Palm nut oil	1094	0	NI	0	R	1	NI	(0)	(0)	(1)	(0)	(1)			Fp	2
Palm kernel oil	2766								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								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								CAS No							
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								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								CAS No							
Palm olein	2250	0	NI	0	R	0	NI	0	(0)	(0)	0	0			Fp	2
Palm olein	2765								CAS No							
Palm stearin	2251	0	NI	0	R	0	NI	0	(0)	(0)	0	0			Fp	2
Palm stearin	555								CAS No							
Paraffin wax, highly-refined	1086	(5)	NI	(5)	(NR)	0	(0)	(0)	(0)	(0)	(0)	(0)			Fp	2
Paraffin wax, highly-refined	556								CAS No			8002-74-2				
Paraffin wax, semi-refined	2244	(5)	NI	(5)	NR	0	(0)	(0)	(0)	(0)	(0)	(0)	T		Fp	3
Paraffin wax, semi-refined	565								CAS No							
Paraldehyde	1098	0	0	0	NR	0	NI	1	0	0	1	3			D	3
Paraldehyde	557								CAS No			123-63-7				
Pentachloroethane	1099	3	2	2	NI	3	1	1	(1)	1	(1)	(1)	CT		S	3
Pentachloroethane	558								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								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 (greater than 50%), cyclopentene and isomers, mixtures	3560								CAS No							
Pentaethylene hexamine	1103	0	NI	0	NI	4	NI	1	(2)	(3)	3	(3)	Ss		D	3
Pentaethylenehexamine	560								CAS No			4067-16-7				
Pentane	1105	3	NI	3	R	3	NI	0	0	0	1	1			E	2
Pentane (all isomers)	561								CAS No			109-66-0				

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1,5-Pentanedial solution, (5-50%) (#)	1107	0	NI	0	R	3	0	1	0	3	3	3	SsSr		D	3	
Glutaraldehyde solutions (50% or less)	362								CAS No			111-30-8					
Pentanoic acid	1109	1	NI	1	NI	2	NI	1	2	(3)	3	3			FD	3	
Pentanoic acid	562								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								CAS No								
1-Pentanol	1110	1	1	1	(R)	1	0	1	0	(3)	2	3			FED	3	
n-Amyl alcohol	473								CAS No			71-41-0					
2-Pentanol	1111	1	1	1	R	1	0	0	(0)	(2)	2	2			D	2	
sec-Amyl alcohol	637								CAS No			6032-29-7					
Pentasodium triphosphate (*)	2418	Inorg	0	0	Inorg	1	NI	NI	NI	NI	NI	NI			NI	NI	
	3694								CAS No								
Pentene (all isomers)	1992	2	NI	2	NI	(2)	NI	(0)	(0)	(0)	(0)	(1)			E	2	
Pentene (all isomers)	563								CAS No								
1-Pentene	1114	2	NI	2	NI	(2)	NI	(0)	(0)	0	(0)	(1)			E	2	
1-Pentene	2679								CAS No			109-67-1					
2-Pentene	1115	2	NI	2	NI	2	NI	(0)	(0)	(0)	(0)	(1)			E	2	
2-Pentene	2678								CAS No			109-68-2					
Phenol	1124	1	2	2	R	3	0	2	2	(3)	3	3		NT	S	3	
Phenol	566								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								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								CAS No								
[[[(phosphonomethyl)imino]bis[ethylenenitrilobis(methylene)]]tetrakisphosphonic acid, ammonium salt solution (60% or less)]	2509	0	NI	0	NR	2	(0)	(0)	(0)	(1)	(1)	(1)			D	1	
[[[(Phosphonomethyl)imino]bis[ethylenenitrilobis(methylene)]]tetrakisphosphonic acid, ammonium salt solution (60% or less)]	4077								CAS No			70714-66-8					
Phosphoric acid	1138	0	NI	0	Inorg	1	NI	1	1	3	3	3			D	3	
Phosphoric acid	567								CAS No			7664-38-2					

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Phosphorus (elemental yellow)	1139	Inorg	(3)	(3)	Inorg	6	4	0	0	0	2	1			S	2
Phosphorus, yellow or white	568								CAS No		7732-14-0					
Phthalic anhydride (molten)	1146	1	NI	1	R	2	0	1	0	(3)	1	3	SsSr		S	3
Phthalic anhydride (molten)	569								CAS No		85-44-9					
alpha-Pinene	40	4	NI	4	R	4	NI	0	0	0	1	(1)	Ss	T	F	3
alpha-Pinene	109								CAS No		80-56-8					
beta-Pinene	41	4	NI	4	(R)	4	NI	0	0	0	1	(1)	Ss	NT	F	3
beta-Pinene	141								CAS No		1330-16-1					
Pine oil	1148	4	NI	4	NR	4	NI	0	0	(1)	(1)	(1)	Ss	(T)	Fp	3
Pine oil	570								CAS No		8002-09-3					
Piperazine, 68% Aqueous	2433	0	NI	0	NR	2	NI	0	0	2	3A	3	SsSrN		SD	3
Piperazine, 68% solution	3748								CAS No		110-85-0					
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								CAS No							
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								CAS No							
Polyalkene sulphonic acid (C20-C28), sodium salt (#)	2481	(5)	(4)	(4)	(NR)	1	0	(1)	(0)	(2)	(2)	(2)			Fp	2
Polyalkene sulphonic acid (C20-C28), sodium salt	4057								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								CAS No							
Polyalkylalkenaminesuccinimide, molybdenum oxysulphide	2379	NI	0	0	NR	0	NI	0	0	(0)	0	0			Fp	2
Polyalkylalkenaminesuccinimide, molybdenum oxysulphide	3422								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								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								CAS No							
Poly N-alkylmethacrylamide ammonium acrylate copolymer (20 % in DEGME) (**)	2468	0	NI	0	NR	2	NI	NI	NI	NI	NI	NI			D	NI
	3931								CAS No							

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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								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								CAS No									
Poly alkyl(C18-C22)methacrylates/lauryl acrylate/vinyl acetate (40% in naphtha)	2512	(5)	(5)	(5)	NR	0	NI	0	0	(1)	1	(1)			Fp	2		
	4161								CAS No									
Polyaluminium chloride (sol.)	1136	Inorg	0	0	Inorg	0	NI	(0)	(0)	(1)	(0)	(1)			D	1		
Polyaluminium chloride solution	584								CAS No			1327-41-9						
Polybutene	1154	0	NI	0	(NR)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			Fp	2		
Polybutene	585								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								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								CAS No									
Polyether, borated	1863	0	NI	0	NR	3	1	0	(0)	(1)	1	0			D	1		
Polyether, borated	572								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								CAS No									
Polyethylene amines / paraffin mixtures	1991	(5)	NI	(5)	NR	3	0	0	(1)	(3)	(2)	(3)	Ss		Fp	3		
Polyethylene polyamines (more than 50% C5 -C20 paraffin oil)	591								CAS No									
Polyethylene glycol	1157	0	NI	0	NR	0	NI	0	0	0	1	1			D	1		
Polyethylene glycol	589								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								CAS No			24991-55-7						
Poly(ethylene glycol) methylbutenyl ether (MW >1000)	2395	NI	0	0	R	1	NI	0	0	(0)	0	0			D	0		
Poly(ethylene glycol) methylbutenyl ether (MW>1000)	3501								CAS No									
Polyethylene polyamines	2367	0	NI	0	NR	3	0	1	0	(3)	2	(3)	Ss		D	3		
Polyethylene polyamines	3131								CAS No									
Polyferric sulphate solution	338	Inorg	0	0	Inorg	(2)	NI	1	(1)	(3)	3	(3)			D	3		
Polyferric sulphate solution	592								CAS No									

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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								CAS No									
Polyglycerol	1511	NI	NI	NI	NI	NI	NI	0	(0)	(0)	(0)	(0)			D	0		
Polyglycerol	594								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								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								CAS No									
(Polyisobutene) amino products in aliphatic hydrocarbons	2455	0	NI	(5)	NR	2	NI	0	0	(1)	1	0	A		Fp	3		
(Polyisobutene) amino products in aliphatic hydrocarbons	3811								CAS No									
Polyisobutenyl anhydride adduct	2127	0	NI	0	NR	0	NI	0	0	(1)	0	1			FD	1		
Polyisobutenyl anhydride adduct	2256								CAS No									
Poly(4+)isobutylene	2264	0	NI	0	NR	0	NI	(0)	(0)	(0)	(0)	(0)			Fp	2		
Polyisobutylene (MW≤224)	578								CAS No									
Polymethylene polyphenyl isocyanate	1153	NI	(2)	(2)	NR	0	0	0	0	(2)	2	2	SsSr		S	2		
Polymethylene polyphenyl isocyanate	595								CAS No								9016-87-9	
Polyolefin acid, potassium salt	1895	NI	NI	NI	NR	0	NI	0	0	(0)	0	0			NI	0		
Potassium salt of polyolefin acid	2199								CAS No									
Polyolefinamide alkene(C16+)amine (LOA)	2104	5	NI	5	NR	0	NI	0	0	(1)	1	(1)			Fp	2		
Polyolefin amide alkeneamine (C17+)	597								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								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								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								CAS No									
Polyolefin amide alkylene amine polyol	1989	0	2	2	NR	0	NI	0	0	(0)	0	0			Fp	3		
Polyolefin amide alkeneamine polyol	602								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								CAS No								98761-78-5	

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Polyolefinamine (C28-C250) (LOA)	2107	0	NI	0	NR	2	NI	0	(0)	(2)	2	(1)			Fp	2		
Polyolefinamine in aromatic solvent	611								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								CAS No									
Polyolefinamine (C28-C250) (LOA)	2107	0	NI	0	NR	2	NI	0	(0)	(2)	2	(1)			Fp	2		
Polyolefinamine (C28-C250)	609								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								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								CAS No									
Polyolefin (molecular weight 300+) (LOA)	1968	0	NI	0	NR	0	NI	0	0	0	0	0			Fp	2		
Polyolefin (molecular weight 300+)	596								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								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								CAS No									
Poly(oxy-1,2-ethanediyl), alpha-(nonylphenyl)-omega-hydroxy-, phosphate	2506	(4)	(3)	(3)	NR	3	(1)	(1)	(1)	(3)	(2)	(3)			S	3		
Poly(oxy-1,2-ethanediyl), alpha-(nonylphenyl)-omega-hydroxy-, phosphate	4158								CAS No			51811-79-1						
Polyoxyethylene sorbitan monooleate	1442	3	(2)	3	R	2	0	0	(0)	(0)	0	0			D	0		
Poly(20)oxyethylene sorbitan monooleate	577								CAS No			9005-65-6						
Polyoxypropylene diamine	2352	1	NI	1	NR	1	NI	0	0	(3)	3	3			D	3		
	3112								CAS No									
Polypropylene	1512	0	NI	0	NR	(0)	NI	(0)	(0)	(0)	(0)	(0)			F	1		
Poly(5+)propylene	579								CAS No			9003-07-0						
Polypropylene glycol	1159	0	NI	0	(NR)	1	NI	1	0	(1)	1	1			D	1		
Polypropylene glycol	612								CAS No			25322-69-4						
Polysiloxane	1161	NI	4	4	NI	2	NI	0	(0)	(0)	0	0			F	1		
Polysiloxane	613								CAS No									
Polysiloxane	1161	NI	4	4	NI	2	NI	0	(0)	(0)	0	0			F	1		
Dimethylpolysiloxane	275								CAS No									

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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									CAS No						
Potassium carbonate solution	2465	Inorg	0	0	Inorg	2	NI	0	0	(0)	2	2			D	2
Potassium carbonate solution	3928									CAS No						
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									CAS No						
Potassium chloride solution	1513	0	0	0	Inorg	1	0	0	(0)	(0)	0	0			D	0
Potassium chloride solution	614									CAS No	7447-40-7					
Potassium formate solution (75% or more)	2121	0	NI	0	R	0	NI	(0)	(0)	(2)	2	2			D	2
Potassium formate solutions	615									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									CAS No	1310-58-3					
Potassium iodide	2484	Inorg	(0)	(0)	Inorg	1	0	0	0	(0)	0	0	T		D	2
Potassium iodide	4060									CAS No	7681-11-0					
Potassium oleate	1497	3	NI	3	R	4	NI	(0)	(0)	(1)	1	1			FD	1
Potassium oleate	617									CAS No	143-18-0					
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									CAS No						
Propanol	1180	0	NI	0	R	0	NI	1	0	0	1	2	R		D	3
n-Propyl alcohol	488									CAS No	71-23-8					
Propanolamine	1183	0	NI	0	R	2	NI	0	1	(3)	3	3			D	3
n-Propanolamine	485									CAS No	156-87-6					
2-Propene-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer (aqueous solution)	2420	0	NI	0	R	2	0	0	(0)	(0)	0	(0)			D	0
2-Propene-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer	3696									CAS No						
2-Propenoic acid polymer with 4-(1,1-dimethylethyl)phenol, formaldehyde, 2,5-furandione, 2-methyloxirane and oxirane (65% in naphtha/xylene)	2491	(5)	NI	(5)	NR	2	NI	0	0	(0)	(0)	0	A		Fp	3
2-Propenoic acid polymer with 4-(1,1-dimethylethyl)phenol, formaldehyde, 2,5-furandione, 2-methyloxirane and oxirane (65% in naphtha/xylene)	4125									CAS No	178603-70-8					
2-Propenoic acid polymer with furandione (65% in 2-butoxyethanol)	2435	0	NI	0	NR	2	0	1	0	0	2	2			Fp	2
2-Propenoic acid polymer with furandione (65% in 2-butoxyethanol)	3750									CAS No						

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beta-Propiolactone	1184	0	NI	0	R	(2)	NI	2	(2)	4	3B	3	CM		D	3
beta-Propiolactone	142								CAS No		57-57-8					
Propionaldehyde	1185	0	NI	0	R	2	NI	1	0	1	2	2			DE	2
Propionaldehyde	619								CAS No		123-38-6					
Propionic acid	1186	0	NI	0	R	2	NI	0	0	(3)	3B	3			D	3
Propionic acid	620								CAS No		79-09-4					
Propionic anhydride	1187	0	NI	0	R	2	NI	0	0	(3)	2	3			FD	3
Propionic anhydride	621								CAS No		123-62-6					
Propionitrile	1188	0	NI	0	NI	0	NI	3	3	4	1	2	R		D	3
Propionitrile	622								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								CAS No		109-60-4					
Propylamine	1194	0	NI	0	NI	1	NI	2	2	3	3	3			DE	3
n-Propylamine	490								CAS No		107-10-8					
Propyl benzene	1196	NI	NI	NI	NI	3	NI	NI	NI	NI	NI	NI		(T)	FE	NI
Propylbenzene	2686								CAS No		103-65-1					
Propyl chloride	1198	2	NI	2	NI	1	NI	0	NI	NI	NI	NI			FED	2
n-Propyl chloride	489								CAS No		540-54-5					
Propylene carbonate	2056	0	NI	0	R	0	NI	0	0	(3)	2	3			D	3
Propylene carbonate	624								CAS No		108-32-7					
Propylene dimer	1201	3	NI	3	R	3	NI	NI	NI	NI	NI	NI			E	2
Propylene dimer	625								CAS No							
1,2-Propylene glycol	1202	0	NI	0	R	0	0	0	0	0	0	0			D	0
Propylene glycol	626								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								CAS No		108-65-6					
Propylene glycol monoalkyl ether	1958	0	NI	0	NR	0	NI	0	1	0	2	3			D	3
Propylene glycol monoalkyl ether	628								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								CAS No		4169-04-4					

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Propylene oxide	76	0	NI	0	R	2	NI	1	2	2	2	3	CM		DE	3
Propylene oxide	630								CAS No		75-56-9					
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								CAS No							
Propylene tetramer	2255	NI	4	4	NR	(4)	NI	(0)	(0)	(1)	(1)	(1)			F	1
Propylene tetramer	631								CAS No		6842-15-5					
Propylene trimer	1207	5	4	4	NR	3	2	(0)	(0)	(1)	(1)	(1)			FE	2
Propylene trimer	632								CAS No		13987-01-4					
Pyridine	1213	0	NI	0	R	3	0	1	1	2	1	3		NT	D	3
Pyridine	634								CAS No		110-86-1					
Pyridine bases	2131	1	NI	1	R	2	NI	2	1	(3)	3B	3			FED	3
Paraldehyde-ammonia reaction product	1989								CAS No							
Pyridinium, 1-(phenylmethyl)-, ethyl methyl derivs., chlorides	2507	3	NI	3	NR	4	2	NI	NI	NI	(3B)	(3)			D	3
Pyridinium, 1-(phenylmethyl)-, ethyl methyl derivs., chlorides	4159								CAS No		68909-18-2					
Pyrolysis gasoline	2271	(4)	(3)	(3)	(R)	(3)	(1)	1	0	(2)	2	2	TCM		FE	3
Pyrolysis gasoline (containing benzene)	1990								CAS No							
Quaternary ammonium compounds, benzyl-C12-14 (even-numbered)-alkyldimethyl, chlorides solution	2494	3	NI	3	NR	4	NI	1	0	(3)	3B	3			D	3
	4128								CAS No		68424-85-1					
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								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								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								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								CAS No							
Rosin	1219	3	NI	3	NR	3	NI	0	0	2	(1)	1	Ss		S	2
Rosin	635								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								CAS No							

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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								CAS No		8001-23-8					
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								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								CAS No							
Silica slurry	1514	Inorg	0	0	Inorg	0	0	(0)	(0)	0	(0)	(0)			S	0
Microsilica slurry	2507								CAS No		7631-86-9					
Sodium acetate	1498	0	NI	0	R	0	NI	0	0	0	1	1			D	1
Sodium acetate solutions	639								CAS No		127-09-3					
Sodium aluminate (solution)	1234	Inorg	0	0	Inorg	3	1	(0)	(0)	(3)	(3)	(3)			D	3
Sodium aluminate solution	641								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								CAS No		1344-00-9					
Sodium benzoate	1475	0	NI	0	R	1	NI	0	(0)	(1)	0	1			D	1
Sodium benzoate	644								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								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								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								CAS No		7647-15-6					
Sodium carbonate	1243	Inorg	0	0	Inorg	1	NI	0	0	2	1	2			SD	2
Sodium carbonate solution	646								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			D	2
Sodium chlorate solution (50% or less)	647								CAS No		7775-09-9					
Sodium dichromate solution	487	Inorg	0	0	Inorg	4	1	2	2	4	2	3	CMSsSr		D	3
Sodium dichromate solution (70% or less)	649								CAS No		10588-01-9					
Sodium dodecyl sulphate (*)	2451	0	NI	0	R	3	1	NI	NI	NI	NI	NI			NI	NI
	3869								CAS No							

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Sodium hydrogen sulphide/Ammonium sulphide(mixture)	1253	Inorg	0	0	Inorg	3	NI	(2)	(2)	(3)	(3)	(3)			D	3		
Sodium hydrosulphide/Ammonium sulphide solution	653								CAS No									
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								CAS No									
Sodium hydrogen sulphide,solutions	1252	Inorg	0	0	Inorg	1	NI	2	2	(3)	(3)	3			D	3		
Sodium hydrosulphide solution (45% or less)	652								CAS No								16721-80-5	
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								CAS No								7631-90-5	
Sodium hydroxide (30% or less)/Sodium aluminate (25% or less) solution (#)	2486	Inorg	(0)	(0)	Inorg	3	1	0	(0)	(3)	3	(3)			D	3		
	3914								CAS No									
Sodium hydroxide solution (#)	1254	Inorg	0	0	Inorg	2	NI	1	1	3	3C	3			D	3		
Sodium hydroxide solution	654								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			D	3		
Sodium hypochlorite solution (15% or less)	2785								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			D	3		
Sodium hypochlorite solution (Full strength solution)	655								CAS No								7681-52-9	
Sodium methylate (**)	2443	NI	NI	(0)	(R)	(2)	NI	NI	NI	NI	NI	NI	T		DE	NI		
Sodium methylate	3822								CAS No									
Sodium Methylate (21-30% in Methanol)	2427	0	NI	0	R	1	NI	2	(2)	(3)	3	3	T		D	3		
Sodium methylate 21-30% in methanol	3608								CAS No									
Sodium nitrate	1259	Inorg	0	0	Inorg	0	NI	(0)	(0)	(0)	(1)	(1)			SD	1		
Sodium nitrate	656								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								CAS No								7632-00-0	
Sodium oxalate solution (#)	2518	0	(1)	(1)	R	2	1	1	0	(2)	(2)	2			D	2		
Sodium oxalate solution	4199								CAS No									
Sodium perborate monohydrate	2284	Inorg	NI	NI	Inorg	3	NI	1	0	(3)	2	3			NI	3		
Sodium perborate monohydrate	2948								CAS No									
Sodium petroleum sulphonate	1860	0	NI	0	(NR)	2	NI	0	(0)	(2)	1	2			S	2		
Sodium petroleum sulphonate	660								CAS No									

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Sodium polyacrylate solution	1487	0	NI	0	NR	1	0	0	(0)	(1)	1	1			D	1			
Sodium poly(4+)acrylate solutions	826								CAS No										
Sodium silicate (solution)	1262	Inorg	0	0	Inorg	2	NI	1	0	(3)	3	3			D	3			
Sodium silicate solution	661								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								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								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								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								CAS No										
Sodium thiocyanate	1264	Inorg	0	0	Inorg	2	NI	1	(0)	(1)	0	0			D	1			
Sodium thiocyanate solution (56% or less)	667								CAS No								540-72-7		
Sorbitan monooleate	2215	(5)	NI	(5)	R	3	NI	0	NI	NI	0	0			Fp	2			
Sorbitan monooleate	2408								CAS No										
Sorbitol	1265	0	NI	0	R	0	NI	0	(0)	(0)	(0)	(0)			D	0			
Sorbitol solution	668								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								CAS No										
Soybean oil fatty acids, methyl esters	2431	0	NI	0	R	2	NI	0	0	0	0	0			Fp	2			
Soybean Oil Fatty Acid Methyl Ester	3737								CAS No										
Styrene (monomer)	1273	3	(2)	3	R	3	NI	1	0	2	2	2	CM		FE	3			
Styrene monomer	669								CAS No								100-42-5		
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								CAS No										
Sulpho hydrocarbon (C3-C88) (LOA)	1972	4	NI	4	NR	2	NI	0	0	0	0	0			Fp	2			
Sulphohydrocarbon (C3-C88)	672								CAS No										
Sulpholane	1277	0	1	1	NR	2	0	1	0	0	1	2			SD	2			
Sulpholane	673								CAS No								126-33-0		

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Sulphonated polyacrylate solution	1760	NI	0	0	NI	0	NI	(0)	(0)	(0)	(0)	(0)			D	0
Sulphonated polyacrylate solution	674								CAS No							
Sulphur	906	Inorg	0	0	Inorg	0	NI	0	0	(1)	1	1			S	1
Sulphur (molten)	675								CAS No			7704-34-9				
Sulphuric acid	1280	0	NI	0	Inorg	2	NI	0	(0)	3	3C	3	C		D	3
Sulphuric acid, spent	677								CAS No			7664-93-9				
Sulphuric acid	1280	0	NI	0	Inorg	2	NI	0	(0)	3	3C	3	C		D	3
Sulphuric acid	676								CAS No			7664-93-9				
Sulphuric acid	1280	0	NI	0	Inorg	2	NI	0	(0)	3	3C	3	C		D	3
Oleum	549								CAS No			7664-93-9				
Sulphurized fat(C14-C20) (LOA)	1853	0	NI	0	NR	1	NI	0	(0)	(1)	0	(1)			FD	1
Sulphurized fat (C14-C20)	2257								CAS No							
Sulphurized 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								CAS No							
Sunflower oil	1283	0	NI	0	R	0	NI	(0)	(0)	(1)	(0)	(1)			Fp	2
Sunflower seed oil	2782								CAS No			8001-21-6				
sym-Dichlorodiethyl ether	588	1	1	1	NR	1	0	2	3	4	1	3		T	SD	3
Dichloroethyl ether	233								CAS No			111-44-4				
Tall oil acids/linoleic acid dimer/polyalkylenepolyamines/dodecylbenzenesulphonic acid complexes in naphtha/isopropanol	2448	0	NI	0	NR	1	NI	0	0	(0)	0	0	CM		Fp	3
Tall oil acids/linoleic acid dimer/polyalkylenepolyamines/dodecylbenzenesulphonic acid complexes in naphtha/isopropanol	3866								CAS No							
Tall oil acids reaction products with diethylenetriamine and acrylic acid in ethylene glycol	2497	3	NI	3	R	2	NI	0	0	(1)	0	1	Ss		D	2
Tall oil acids reaction products with diethylenetriamine and acrylic acid in ethylene glycol	4131								CAS No			85586-18-1				
Tall oil acids reaction products with triethanolamine	2492	4	NI	4	NR	2	NI	0	0	(1)	1	0			Fp	2
Tall oil acids reaction products with triethanolamine	4126								CAS No			67784-78-5				
Tall oil, crude and distilled	1285	(4)	NI	(4)	(R)	(2)	NI	0	0	(0)	0	0	Ss		Fp	2
Tall oil (crude and distilled)	678								CAS No			68187-71-3				
Tall oil, distilled	2283	0	NI	0	R	0	NI	0	(0)	(0)	0	(0)			Fp	2
Tall oil, distilled	2890								CAS No							

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Tall oil fatty acid (resin acids less than 20%)	1287	0	0	0	R	0	0	0	0	(1)	1	0			Fp	2
Tall oil fatty acid (resin acids less than 20%)	679									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									CAS No						
Tall oil fatty acids reaction products with 2-[(2-aminoethyl)amino]ethanol, di-ethyl sulphate quaternized	2508	(3)	NI	(3)	NR	5	2	NI	NI	NI	(2)	(3)	Ss		D	3
Tall oil fatty acids reaction products with 2-[(2-aminoethyl)amino]ethanol, di-ethyl sulphate quaternized	4160									CAS No	70955-34-9					
Tall oil pitch	2323	3	NI	3	NR	0	0	0	0	(0)	0	(0)			Fp	2
Tall oil pitch	3051									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									CAS No						
Tall oil soap, crude	2432	0	NI	0	R	2	0	(0)	(0)	(3)	(3)	(3)	Ss		Fp	3
Tall oil soap, crude	3735									CAS No						
Tallow	1288	0	NI	0	R	0	NI	0	0	(0)	(0)	(0)			Fp	2
Tallow	682									CAS No	61789-21-6					
Tallowamidopropylamine Oxide in propylene glycol (70% or less) (#)	2482	NI	(2)	(2)	(R)	(4)	(2)	(1)	(1)	(3)	(3)	(3)			D	3
Tallowamidopropylamine Oxide in propylene glycol (70% or less) (#)	4058									CAS No						
Tallow fatty acid	1289	0	NI	0	R	0	NI	0	(0)	(0)	(0)	(0)			Fp	2
Tallow fatty acid	684									CAS No						
1,1,2,2-Tetrachloroethane	53	2	2	2	NR	3	0	2	0	2	2	2			SD	2
Tetrachloroethane	687									CAS No	79-34-5					
1,1,2,2-Tetrachloroethylene	1295	3	2	2	NR	(3)	2	0	0	0	2	1	C		S	3
Perchloroethylene	564									CAS No	127-18-4					
Tetrachloromethane	1296	2	2	2	NR	3	0	0	0	0	1	1	CT		S	3
Carbon tetrachloride	178									CAS No	56-23-5					
Tetradecanoic acid (Myristic acid)	1298	5	NI	0	R	0	NI	0	(0)	(1)	(1)	(1)			Fp	2
n-Tetradecanoic acid	491									CAS No	544-63-8					
Tetradecanoic acid (Myristic acid)	1298	5	NI	0	R	0	NI	0	(0)	(1)	(1)	(1)			Fp	2
Fatty acid (saturated C13+)	347									CAS No	544-63-8					
Tetraethylene glycol	1301	0	NI	0	NR	0	NI	0	0	0	1	1			D	1
Tetraethylene glycol	688									CAS No	112-60-7					

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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
Tetraethylene pentamine	1302	0	NI	0	NR	3	NI	0	2	(3)	3	3	Ss		D	3
Tetraethylene pentamine	689								CAS No		112-57-2					
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								CAS No		78-00-2					
Tetrahydrofuran	1304	0	NI	0	R	0	NI	0	(0)	0	1	2			DE	2
Tetrahydrofuran	690								CAS No		109-99-9					
Tetrahydronaphthalene	1305	3	3	3	NR	3	NI	0	0	(2)	2	0			F	2
Tetrahydronaphthalene	691								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								CAS No		488-23-3					
Tetrapotassium pyrophosphate	2400	Inorg	0	0	Inorg	1	NI	0	NI	NI	NI	NI			D	NI
Tetrapotassium pyrophosphate	3635								CAS No		7320-34-5					
Thioglycolic acid	2496	0	NI	0	R	2	NI	2	2	3	3B	3			D	3
Thioglycolic acid	4130								CAS No		68-11-1					
Thixatrol plus	2210	5	NI	5	R	3	NI	0	0	0	1	1			S	1
Thixatrol Plus	2699								CAS No							
Titanium dioxide slurry	2080	Inorg	1	1	Inorg	1	NI	0	0	0	1	1			S	1
Titanium dioxide slurry	2259								CAS No		13463-67-7					
Toluene	330	2	2	2	R	3	0	0	0	0	2	2	ANR	NT	E	3
Toluene	693								CAS No		108-88-3					
Toluene diisocyanate	1315	(3)	1	1	NR	2	NI	0	(0)	4	3	3	CSsSr		S	3
Toluene diisocyanate	694								CAS No		584-84-9					
Toluidines	1316	1	1	1	R	4	2	1	0	(2)	2	2	CM		FD	3
o-Toluidine	537								CAS No							
2,4-Tolylenediamine	1317	0	2	2	NR	3	0	2	2	4	2	3	CMSs		Fp	3
Toluenediamine	695								CAS No		95-80-7					
Tolyl triazole	2292	1	NI	1	NR	2	0	1	0	(2)	(1)	2			S	2
Tolyl triazole	696								CAS No							
Tributyl phosphate	1319	4	2	2	R	3	0	1	0	2	2	2			F	2
Tributyl phosphate	697								CAS No		126-73-8					

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1,2,3-Trichlorobenzene	2191	4	4	4	NR	4	2	1	0	(2)	2	2			S	2
1,2,3-Trichlorobenzene (molten)	2288								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								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								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								CAS No		79-00-5					
1,1,2-Trichloro-ethylene	329	2	2	2	NR	3	NI	0	0	0	2	2	MC		SD	3
Trichloroethylene	698								CAS No		79-01-6					
Trichloromethane	1328	1	1	1	NR	2	0	2	0	2	1	1	CT		SD	3
Chloroform	186								CAS No		67-66-3					
1,2,3-Trichloropropane	1329	2	2	2	NR	2	0	2	2	2	2	2	C		SD	3
1,2,3-Trichloropropane	6								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								CAS No		76-13-1					
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								CAS No		1330-78-5					
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								CAS No		1330-78-5					
Tridecane	1333	0	NI	0	NI	0	NI	0	0	(1)	1	0			Fp	2
Tridecane	701								CAS No		629-50-5					
Tridecanoic acid	1334	5	NI	5	(R)	3	NI	(0)	(0)	(1)	(1)	(1)			Fp	2
Tridecanoic acid	702								CAS No		638-53-9					
Tridecyl acetate	1768	5	NI	5	NI	0	NI	0	(0)	(2)	2	2			F	2
Tridecyl acetate	703								CAS No		1072-33-9					
Triethanolamine	1338	0	0	0	R	1	NI	0	0	(2)	1	2			D	2
Triethanolamine	704								CAS No		102-71-6					
3-(Triethoxysilyl)propylamine	2445	1	1	1	R	1	NI	1	0	(3)	3B	3	Ss		D	3
3-(Triethoxysilyl)propylamine	3824								CAS No		919-30-2					

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Triethylamine	1339	1	0	0	R	3	0	1	2	2	2	3			D	3
Triethylamine	706								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								CAS No		25340-18-5					
Triethylene glycol	1341	0	NI	0	R	0	0	0	0	0	0	0			D	0
Triethylene glycol	708								CAS No		112-27-6					
Triethylenetetramine	1346	0	NI	0	NR	3	NI	0	2	(3)	3	3	Ss		D	3
Triethylenetetramine	709								CAS No		112-24-3					
Triethylenetetramine/2-piperazine-1-yethylamine mixtures (#)	2456	0	NI	0	NR	2	NI	0	2	(3)	3	3	Ss		D	3
	3872								CAS No							
Triethyl phosphate	1348	0	0	0	NR	1	0	1	0	0	(2)	(2)			D	2
Triethyl phosphate	705								CAS No		78-40-0					
Triethyl phosphite	1349	0	NI	0	R	1	NI	1	0	2	1	2	Ss		FE	2
Triethyl phosphite	710								CAS No		122-52-1					
Triglycerides, C16-C18 and C18 unsaturated, reclaimed (UCO)	2470	(5)	NI	(5)	R	(0)	(0)	(0)	(0)	(1)	(1)	(1)			Fp	2
Used cooking oil (Triglycerides, C16-C18 and C18 unsaturated)** (m)	4023								CAS No		68990-65-8					
Triglycerides, C16-C18 and C18 unsaturated, reclaimed (UCO)	2470	(5)	NI	(5)	R	(0)	(0)	(0)	(0)	(1)	(1)	(1)			Fp	2
Used cooking oil (m)	3974								CAS No		68990-65-8					
Triisopropanolamine	1370	0	0	0	NR	1	0	1	0	0	(2)	3			FD	3
Triisopropanolamine	711								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								CAS No		68937-41-7					
Trimethylacetic acid	1350	1	1	1	R	2	NI	1	1	(2)	2	2			Fp	2
Trimethylacetic acid	714								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								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								CAS No		526-73-8					
2,4,4-Trimethyl hexamethylene diamine	1359	1	NI	1	NI	NI	NI	1	0	(3)	2	3	Ss		D	3
Trimethylhexamethylenediamine (2,2,4- and 2,4,4-isomers)	718								CAS No		25620-58-0					

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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
Trimethyl hexamethylene diisocyanate	1360	0	NI	0	NI	3	NI	0	NI	NI	NI	NI	SsSr		NI	2
Trimethylhexamethylene diisocyanate (2,2,4- and 2,4,4-isomers)	717								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								CAS No							
Trimethylol propane, propoxylated	2274	0	NI	0	(NR)	1	0	0	0	(1)	0	1			SD	1
Trimethylol propane propoxylated	2870								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								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								CAS No				25264-77-4			
Trimethyl phosphite	1365	0	NI	0	R	NI	NI	NI	NI	NI	NI	NI			S	NI
Trimethyl phosphite	713								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								CAS No				110-88-3			
Tripropylene glycol	1372	0	0	0	R	0	0	0	0	(0)	0	0			D	0
Tripropylene glycol	720								CAS No				24800-44-0			
Trixylenyl phosphate	1377	5	4	4	NR	4	1	(0)	(1)	(0)	(1)	(1)	R		S	3
Trixylyl phosphate	721								CAS No				25155-23-1			
Tung oil	1378	0	NI	0	R	(2)	NI	(0)	(0)	(1)	(0)	(1)			Fp	2
Tung oil	2784								CAS No							
Turpentine (wood)	1379	4	NI	4	NI	4	NI	0	(0)	1	(2)	2	SsA	(T)	D	2
Turpentine	722								CAS No				8006-64-2			
Undecanoic acid	1381	4	NI	4	(R)	3	NI	(0)	(0)	(2)	1	(2)			Fp	2
Undecanoic acid	723								CAS No				112-37-8			
1-Undecanol	1382	4	NI	4	R	4	NI	0	0	(2)	2	(1)			Fp	2
Undecyl alcohol	724								CAS No				112-42-5			
1-Undecene	1383	5	NI	5	NR	4	NI	(0)	(0)	(1)	(2)	(1)	A		F	3
1-Undecene	24								CAS No				821-95-4			
Urea	1384	0	0	0	R	1	NI	0	0	(1)	1	(1)			D	1
Urea	2627								CAS No				57-13-6			

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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
Urea	1384	0	0	0	R	1	NI	0	0	(1)	1	(1)			D	1
Urea solution	726								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								CAS No							
Urea/Ammonium nitrate solution (containing < 1% aq. ammonia)	1387	0	NI	0	R	(2)	(0)	0	0	(1)	(1)	(1)			D	1
Urea/Ammonium nitrate solution	729								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								CAS No							
Urea-formaldehyde resin solution	1388	NI	NI	NI	NI	1	NI	1	1	NI	NI	NI	Ss		NI	2
Urea formaldehyde resin solution	725								CAS No							
Vegetable acid oils	2371	0	NI	0	R	0	NI	(0)	(0)	(1)	(1)	(1)			Fp	2
Vegetable acid oils (m)	3138								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								CAS No							
Vegetable protein solution,hydrolyzed	1398	0	NI	0	R	0	NI	(0)	(0)	(0)	(0)	(0)			D	0
Vegetable protein solution (hydrolysed)	734								CAS No							
Vinyl acetate	1400	0	NI	0	R	2	NI	1	0	2	1	1	C		ED	3
Vinyl acetate	735								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								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								CAS No		75-35-4					
Vinyl neodecanoate	1404	5	NI	5	NR	3	NI	0	0	(3)	3	3			F	3
Vinyl neodecanoate	737								CAS No		45115-34-2					
Vinyl toluenes	1409	3	3	3	NR	3	NI	0	0	2	2	1	NM	(T)	F	3
Vinytoluene	739								CAS No		25013-15-4					
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								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								CAS No							

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Xylene (mixed isomers)	1408	3	NI	3	NR	3	0	0	0	0	2	2		(T)	FE	2
Xylenes	743								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								CAS No							
Xylenols (mixtures)	1422	2	NI	2	R	3	NI	1	2	(3)	3	3		(T)	Fp	3
Xylenol	744								CAS No		1300-71-6					
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								CAS No		8013-01-2					
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								CAS No							
Zinc alkenylcarboxamide (LOA)	2053	NI	0	0	NR	0	NI	0	0	(1)	1	(1)			Fp	2
Zinc alkenyl carboxamide	746								CAS No							
Zinc alkyl dithiophosphate	1428	5	NI	5	NR	3	NI	0	0	0	2	2			S	2
Zinc alkyl dithiophosphate (C3-C14)	747								CAS No							
Zinc bromide solutions	2227	Inorg	4	4	Inorg	3	NI	1	(2)	(3)	3B	3	Ss		D	3
Zinc bromide solutions	2617								CAS No							
Zinc chloride	1425	Inorg	4	4	Inorg	4	1	(1)	(1)	(3)	(3)	(3)			D	3
Zinc chloride	2869								CAS No		7646-85-7					
Zinc chloride	1425	Inorg	4	4	Inorg	4	1	(1)	(1)	(3)	(3)	(3)			D	3
Drilling brines (containing zinc chloride)	307								CAS No		7646-85-7					

ANNEX 7

**PROVISIONAL AGENDA FOR THE FIFTY-SEVENTH SESSION OF THE
GESAMP/EHS WORKING GROUP**

- 1 Adoption of the agenda
 - 2 Outcome of other bodies
 - 3 Evaluation of new substances
 - 4 Re-evaluation of substances and consideration of issues related to evaluations
 - 5 Classification issues
 - 6 Consolidation of existing data files
 - 7 Communication and publication
 - 8 Any other business
 - 9 Consideration and adoption of the report
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