

WORKING GROUP ON THE EVALUATION
OF THE HAZARDS OF HARMFUL
SUBSTANCES CARRIED BY SHIP
53rd session
Agenda item 9

EHS 53/9
27 May 2016
Original: ENGLISH

REPORT OF THE FIFTY-THIRD SESSION

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1 INTRODUCTION

1.1 The fifty-third session of the EHS Working Group on the Evaluation of the Hazards of Harmful Substances Carried by Ships was held at the BfR (Federal Institute for Risk Assessment) in Berlin, Germany from 23 to 27 May 2016 under the chairmanship of Dr. Thomas Höfer. The list of experts who attended the meeting is set out in annex 1.

1.2 Having reviewed the agenda and provisional timetable, the group adopted both, as amended, based on proposals by the Chairman.

2 OUTCOME OF OTHER BODIES

Outcome of IMO bodies

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

- .1 the twenty-first meeting of the Working Group on the Evaluation of Safety and Pollution Hazards of Chemicals (ESPH 21), that met from 26 to 30 October 2015 (PPR 3/3/2);
- .2 the Evaluation of Safety and Pollution Hazards (ESPH) Working Group also met during the third meeting of the PPR Sub-Committee, which took place from 15 to 19 February 2016 (PPR 3/WP.3);
- .3 the sixty-ninth session of the Marine Environment Protection Committee (MEPC 69), that met from 18 to 22 April 2016 (MEPC 69/20); and
- .4 the thirtieth session of the Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals (GHS 30), which took place from 9 to 11 December 2015.

2.2 The group noted the information presented and agreed to take action under the relevant agenda items, as appropriate. A summary of the outcome of IMO meetings on matters of relevance to the work of the GESAMP/EHS Working Group is set out in annex 2.

Outcome of UN SCEGHS 30

2.3 As instructed by EHS 52, the Secretariat, in collaboration with the Chairman, prepared two documents which were submitted to the 30th session of the Sub-Committee of Experts on the GHS. The first document requested clarification on the applicability of the GHS criteria to aspiration toxicity category 1, based on kinematic viscosity data to chemical groups other than pure hydrocarbon chemicals, noting inconsistencies in the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Based on this request, the Sub-Committee agreed to the establishment of a correspondence group, led by IMO, together with Finland, the International Paint and Printing Ink Council (IPPIC) and the GESAMP/EHS Chairman to progress this work and submit a proposal to the Sub-Committee aimed at developing such an interpretation.

2.4 The GHS Sub-Committee also noted the information (INF) document submitted by IMO on behalf of GESAMP/EHS providing information from Report and Studies No. 64 relating to floating substances and agreed that, although no work was envisaged on floating substances at this time, concurred that this would be a useful base document should any future criteria be developed by the GHS related to floating substances.

2.5 The group noted these developments and thanked the Secretariat for submitting these documents and looked forward to a report on further developments accordingly.

Activities of GESAMP

2.6 The group noted the report presented by the Chairman on the outcome of the forty-third session of GESAMP, which took place from 31 August to 3 September 2015 in Paris, France, hosted by the Intergovernmental Oceanic Commission of the United Nations Educational, Scientific and Cultural Organization (IOC-UNESCO). A summary of the outcome of the meeting is set out in annex 3.

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 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.

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

.1	Ethylene glycol/sodium alkyl carboxylates mixture	EHS 2475
.2	Ethylene glycol/sodium alkyl carboxylates/borax mixture	EHS 2477
.3	Lauroamidopropyl betaine solution	EHS 2479
.4	Tallowamidopropylamine Oxide in propylene glycol (70% or less)	EHS 2482
.5	Long chain alkylphenol (C14-C18)	EHS 2478
.6	Long chain alkylphenol (C18-C30)	EHS 2476
.7	Alkyl (C10-C15 rich) phenol poly (4-12) ethoxylate	EHS 2480
.8	Polyalkene sulphonic acid, sodium salt	EHS 2481
.9	Bismuth oxide	EHS 2483
.10	Potassium iodide	EHS 2484
.11	Cinnamaldehyde	EHS 2485
.12	Sodium hydroxide (30% or less)/Sodium aluminate (25% or less) solution	EHS 2486
.13	Fish protein concentrate (containing 4% or less formic acid)	EHS 2487
.14	Alcohol (C10-C18) poly (7) ethoxylate	EHS 2488

3.3 The group, in assessing the submitted products, made the following observations and 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 4.

EHS 2475 Ethylene glycol (>85%)/sodium alkyl carboxylates mixture

3.4 The group noted that a comprehensive set of test data had been submitted for this substance and assigned a GESAMP Hazard Profile accordingly. Having considered a generic name proposed for the product, the group agreed to add a minimum percentage value, i.e. >85%, to the entry to ensure greater precision in the name. Having also noted the low vapour pressure of the mixture, 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=NI	A1b=(1)	A1=(1)	A2=R	B1=1	B2=NI
	C1=1	C2=(1)	C3=(1)	D1=0	D2=0	D3=T
	E2=D	E3=2			(#) to the entry	

EHS 2477 Ethylene glycol (>75%)/sodium alkyl carboxylates/borax mixture

3.5 In considering the submission, the group made a minor revision to the name of the substance by adding the concentration limit, i.e. >75%, with a view to providing more precision in the description of the product. Having considered the data submitted, the group assigned a GESAMP Hazard Profile accordingly. Having also noted the low vapour pressure of the mixture, 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=NI	A1b=(1)	A1=(1)	A2=R	B1=1	B2=NI
	C1=1	C2=(1)	C3=(2)	D1=(1)	D2=(1)	D3= RT
	E2 =D	E3 =3			(#) to the entry	

EHS 2479 Lauroamidopropyl betaine solution

3.6 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. Having also noted the low vapour pressure of the mixture, 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=(2)	A1=(2)	A2=R	B1=(4)	B2=(1)
	C1=(0)	C2=(0)	C3=(3)	D1=(1)	D2=(3)	D3=
	E2 =D	E3 =3			(#) to the entry	blank

EHS 2482 Tallowamidopropylamine oxide in propylene glycol (70% or less)

3.7 The group considered the submission and noting that a full set of data had been provided, assigned a GESAMP Hazard Profile accordingly. Having also noted the low vapour pressure of the mixture, 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=NI	A1b=(2)	A1=(2)	A2=(R)	B1=(4)	B2=(2)
	C1=(1)	C2=(1)	C3=(3)	D1=(3)	D2=(3)	D3= blank
	E2=D	E3=3			(#) to the entry	

EHS 2478 Long chain alkylphenol (C14-C18)

3.8 Having considered the submission, the group confirmed the name of the substance as submitted and having noted that a full set of data had been provided, assigned a GESAMP Hazard Profile accordingly. Having also noted the low vapour pressure of the mixture, 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=NI	A1=(0)	A2=NR	B1=(0)	B2=(0)
	C1=(0)	C2=(0)	C3=(2)	D1=(2)	D2=(0)	D3= blank
	E2=Fp	E3=2				(#) to the entry

EHS 2476 Long chain alkylphenol (C18-C30)

3.9 In considering the submission, the group confirmed the name of the substance, as proposed, and having noted that a full set of data had been provided, assigned a GESAMP Hazard Profile accordingly. Having also noted the low vapour pressure of the mixture, 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=NI	A1=(0)	A2=(NR)	B1=(1)	B2=(0)
	C1=(0)	C2=(0)	C3=(2)	D1=(2)	D2=(0)	D3=blank
	E2=Fp	E3=2				(#) to the entry

EHS 2480 Alkyl (C10-C15, C12 rich) phenol poly (4-12) ethoxylate

3.10 Having considered the submission, the group considered the data provided for the product and assigned a GESAMP Hazard Profile accordingly. Having also noted the low vapour pressure of the mixture, 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=(4)	A1=(4)	A2=(NR)	B1=(0)	B2=NI
	C1=(0)	C2=(0)	C3=(2)	D1=(2)	D2=(1)	D3=blank
	E2=SD	E3=2				(#) to the entry

EHS 2481 Polyalkene sulphonic acid (C20-C28), sodium salt

3.11 In considering the submission, the group agreed that information on the carbon chain length should be included in the entry, in order to provide more clarity in the description of the product. In addition, the group agreed that, in line with the UN naming protocol, "sulfonic" was amended to "sulphonic" in the entry. Having reviewed the data submitted, the group assigned a GESAMP Hazard Profile accordingly. Having also noted the low vapour pressure of the mixture, 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=(4)	A1=(4)	A2=(NR)	B1=1	B2=0
	C1=(1)	C2=(0)	C3=(2)	D1=(2)	D2=(2)	D3=blank
	E2=Fp	E3=2				(#) to the entry

EHS 2483 Bismuth oxide

3.12 The group considered the submission for bismuth oxide and noting that a full set of data had been provided, assigned a GESAMP Hazard Profile accordingly.

<i>Rating</i>	A1a=Inorg	A1b=(0)	A1=(0)	A2=Inorg	B1=(0)	B2=(0)
	C1=0	C2=(0)	C3=0	D1=0	D2=0	D3=blank
	E2=S	E3=0				

EHS 2484 Potassium iodide

3.13 The group considered the submission for potassium iodide and noting that a full set of data had been provided, assigned a GESAMP Hazard Profile accordingly.

<i>Rating</i>	A1a=Inorg	A1b=(0)	A1=(0)	A2=Inorg	B1=1	B2=0
	C1=0	C2=0	C3=(0)	D1=0	D2=0	D3=T
	E2=D	E3=2				

EHS 2485 Cinnamaldehyde

3.14 In considering the submission, the group noted that a full set of data had been provided and assigned a GESAMP Hazard Profile accordingly.

<i>Rating</i>	A1a=1	A1b=(2)	A1=(2)	A2=R	B1=2	B2=0
	C1=1	C2=1	C3=(2)	D1=2	D2=1	D3=Ss
	E2=SD	E3=2				

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

3.15 Having considered the product and noting that a full set of data had been submitted, the group assigned a GESAMP Hazard Profile, as set out below. In assigning a B1 rating of 5 for aquatic toxicity, the group agreed that this rating, although high, was consistent with the studies provided. The group further noted that testing carried out in seawater rather than freshwater may result in a lower B1 rating, due to the buffering effects of sea water (see Report and Studies No.64, section 4.2.13 (p.35)). Having also noted the low vapour pressure of the mixture, 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=Inorg	A1b=(0)	A1=(0)	A2=Inorg	B1=5	B2=0
	C1=0	C2=(0)	C3=(3)	D1=3	D2=(3)	D3=blank
	E2=D	E3=3			(#) to the entry	

EHS 2487 Fish silage protein concentrate (containing 4% or less formic acid)

3.16 The group considered the submission and having reviewed the data provided, assigned a GESAMP Hazard Profile for the product. The group agreed to modify the name to "Fish silage protein concentrate (containing 4% or less formic acid)" to better reflect the nature of the product. The group also noted some contradictions in the physical and chemical data submitted, notably with regard to solubility and density, and consequently assigned the more conservative rating of Fp column E2.

<i>Rating</i>	A1a=NI	A1b=0	A1=0	A2=R	B1=2	B2=NI
	C1=(0)	C2=(0)	C3=(0)	D1=(1)	D2=(1)	D3=blank
	E2=Fp	E3=2				

EHS 2488 Alcohol (C10-C18) poly (7) ethoxylate

3.17 The group considered the submission and, having reviewed the data provided, assigned a GESAMP Hazard Profile for the product. Having also noted the low vapour pressure of the mixture, 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=NI	A1b=(3)	A1=(3)	A2=R	B1=3	B2=1
	C1=(1)	C2=(0)	C3=(2)	D1=(2)	D2=(2)	D3=blank
	E2=D	E3=2			(#) to the entry	

Additional considerations**EHS 761 Ethylene glycol**

3.18 In considering data submitted by industry for two new entries for ethylene glycol mixtures (EHS 2475 and EHS 2477), the group also reviewed the profile for ethylene glycol. A "T" rating for column D3 was accordingly assigned and, as a consequence, the E3 rating was also amended to 2.

<i>Amended rating</i>	D3=T	E3=2
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Alkylphenols

3.19 In reviewing the two alkylphenol submissions to this session (EHS 2476 and EHS 2478, see above) and having assigned GESAMP Hazard Profiles for these substances, the group noted potential inconsistencies in the ratings of structurally similar products on the GESAMP Composite List and agreed to review these at EHS 54, with a view to ensuring a consistent approach in the assessment of all substances within the product family.

4 CORRESPONDENCE WITH INDUSTRY/GOVERNMENT AND CONSIDERATION OF ISSUES RELATED TO EVALUATIONS

4.1 The group recalled that as part of its work it routinely considered requests from industry and industry groups, as well as government organizations, for the re-assessment of products, based on the submission of new data or new scientific insights into substances on the GESAMP Composite List 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 communication of any amendments relating to such matters to the attention of IMO (i.e. the ESPH Working Group of the PPR Sub-Committee).

4.3 The group considered the following products:

.1	Dimethoxymethane	EHS 2405
.2	Polyethylene polyamines	EHS 2367
.3	Tall oil fatty acid (resin acids <2%)	EHS 1287
.4	tert-Amyl methyl ether	EHS 2141
.5	Ethoxylated tallow amine (>95%)	EHS 2313
.6	Octanoic acid	EHS 1074
.7	1,2-Butylene oxide	EHS 403
.8	Titanium dioxide (64-77% solution in water)	EHS 2080
.9	Alkyl (C12-C14) polyglucoside solution (max 55% active material)	EHS 2137
.10	Alkanes (C10-C26), linear and branched	EHS 2392
.11	Isophorone diisocyanate	EHS 881
.12	1,5,9-Cyclododecatriene	EHS 534
.13	2,6-Diaminohexanoic acid phosphonate mixed salts solution	EHS 2469
.14	(Polyisobutene) amino products in aliphatic hydrocarbons	EHS 2455
.15	Phosphoric acid	EHS 1138
.16	Fumaric adduct of rosin (water dispersion)	EHS 810
.17	n-Octyl mercaptan	EHS 2461
.18	n-Dodecyl mercaptan	EHS 2462
.19	3-(Triethoxysilyl) propylamine	EHS 2445
.20	Triethylenetetramine/2-piperazine-1-ylethylamine mixtures	EHS 2456
.21	alpha-Pinene	EHS 40

4.4 The results of the group's discussions on the respective substances are set out below. Any agreed modifications to the assigned hazard profiles for these substances are highlighted in the revised GESAMP/EHS Composite List, set out in annex 5.

EHS 2405 Dimethoxymethane

4.5 Following a historical review of the background to this substance and noting that it had never been formally evaluated by the group, as the company had not paid the evaluation fee, the group concurred that this product entry should be deleted from the Composite List.

EHS 2367 Polyethylene polyamines

4.6 Having reviewed the data on file for this product, the group agreed that the E3 rating should be amended from 0 to 3, in accordance with the rules set out in table 16 of Reports and Studies No. 64.

Amended rating E3=3

EHS 1287 Tall oil fatty acid (resin acids <2%)

4.7 The group, having noted that the EHS name was not consistent with the IBC Code entry for the associated product (in terms of the concentration value identified in the entry) and having reviewed the data on file, concurred that the EHS name should be amended to Tall oils fatty acid (resin acids <20%).

Amended name Tall oils fatty acid (resin acids <20%)

EHS 2141 tert-Amyl methyl ether

4.8 The group undertook a review of the C3 rating based on the submission of more recent test data. Having considered the information submitted and noting that actual test data were now available, the group amended the C3 rating from (2) to 2.

Amended rating C3=2

EHS 2313 Ethoxylated tallow amine (>95%)

4.9 The group reviewed this product, with particular consideration given to the D3 and E2 ratings. Having considered the data submitted, the group noted that the product name was very general and referred to a range of products with physical and chemical properties that varied considerably from product to product. Based on the data considered, it was determined that the majority of the products demonstrated persistent floater properties and as such, the group agreed that the E2 rating of Fp should be retained. The group also noted, that the product was a skin sensitizer and therefore agreed to add Ss to column D3.

Amended rating D3=Ss

EHS 1074 Octanoic acid

4.10 The group, having noted that the CAS number for Octanoic acid was incorrect in the Composite List, agreed to update the entry with the correct CAS number, 124-07-2.

EHS 403 1,2-Butylene oxide

4.11 The group, having considered more recent data available for skin and eye irritation for this product, agreed that the D1 and D2 ratings of 1 should both be modified to 2.

Amended rating D1=2 D2=2

EHS 2080 Titanium dioxide (64 - 77% solution in water)

4.12 The group considered a request to review the E2 rating for this substance, which was currently recorded as NI. Having considered the submitted data, the group concurred that the E2 rating should be amended to S based on new available data. The group further noted that

since the product was essentially insoluble, the name of the entry did not adequately reflect the substance and therefore agreed that this should be renamed to "Titanium dioxide slurry", which would also harmonize the name of the entry with that set out in the IBC Code.

Amended rating E2=S *Amended name* Titanium dioxide slurry

EHS 2137 Alkyl (C12-C14) polyglucoside solution (max 55% active material)

4.13 The group, having considered the double entry for this product in the Composite List, determined that one entry could be deleted, as the second entry was associated with a tripartite agreement that had expired and was therefore no longer needed.

EHS 2392 Alkanes (C10-C26), linear and branched

4.14 The group noted that there was a double entry for this product in the Composite List. Having reviewed the two entries, the group agreed to retain both given that the profile now related to two different products in the MEPC.2/Circular, with different flashpoints.

EHS 881 Isophorone diisocyanate

4.15 The group, having agreed to review the aspiration hazard for this product at EHS 52, considered the information on file and determined that the "A" rating under column D3 should be deleted.

Amended rating Delete "A" from D3

EHS 534 1,5,9-Cyclododecatriene

4.16 The group, having agreed to review the aspiration hazard for this product at EHS 52, considered the information on file and determined that no change was needed and that the D3 rating of "A" should be retained for this product.

EHS 2469 2,6-Diaminohexanoic acid phosphonate mixed salts solution

4.17 Further to a request received from industry, the group reviewed the C3 and D3 ratings for this product. Having considered the information submitted, the group noted that the information provided for vapour pressure indicated that the mixture was non-volatile.

4.18 The group, however, noted that in order to address exposure to aerosols or mists, the extrapolation method had been used to assign an estimated value of (3) in column C3 and, as a result, was of the view that this rating should remain unchanged.

4.19 Having also noted the low vapour pressure of the mixture, 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. In addition, the group agreed to delete the "T" in the D3 column, given that it referred to respiratory irritation, which is not covered by the T rating according to Reports and Studies No. 64.

EHS 2455 (Polyisobutene) amino products in aliphatic hydrocarbons

4.20 Further to a request from industry, the group reviewed the profile for this product based on a proposed variation in the concentration of solvents in the formulation. Having considered the possible implications of such a concentration change, the group concluded

that, based on expert opinion, the existing profile, as initially assigned, would remain valid for the new proposed formulation.

EHS 1138 Phosphoric acid

4.21 The group, having considered actual test data submitted by industry for the product, agreed that the existing C1 and C2 ratings of (3) should be modified to 1.

Amended rating C1=1 C2=1

Review of Ss ratings

4.22 The group considered a number of substances with a view to reviewing the assigned Ss ratings in the D3 column. The D3 rating of Ss was reconfirmed for all products considered, as follows:

.1	EHS 810	Fumaric adduct of rosin (water dispersion)
.2	EHS 2461	n-Octyl mercaptan
.3	EHS 2462	n-Dodecyl mercaptan
.4	EHS 2445	3-(Triethoxysilyl)propylamine
.5	EHS 2456	Triethylenetetramine/2-piperazine-1-ylethylamine mixtures
.6	EHS 40	alpha-Pinene

5 CLASSIFICATION ISSUES

Mineral oils

5.1 The group, having noted the request made by ESPH at PPR 3 to review the mineral oils for the purposes of the mixture calculation, considered how to undertake this work.

5.2 The group recalled that, in general, it does not evaluate products that are covered under MARPOL Annex I, notably petroleum products. However, it has, on occasion, generated hazard profiles for some petroleum products, at the request of ESPH, in particular for gasoline/petrol and diesel (automotive). These were published in the report of GESAMP/EHS 47 (BLG.1/Circ.30), but were not included in the GESAMP Composite List. The group noted, however, that the GESAMP Composite List did contain profiles for some petroleum products, such as Pyrolysis gasoline and White Spirit, which are oil distillation fractions, like gasoline and diesel oil.

5.3 Mineral oils are, however, often included as a component in mixtures that are classified and shipped under MARPOL Annex II, which regulates the transport of bulk liquid chemicals. Currently, the assignment of carriage requirements for mixtures is determined using a mixture calculation and, when these include mineral oil, a set component factor is assigned to the mineral oil component for the purposes of the calculation, as set out in MEPC.1/Circ.512.

5.4 In considering the request by ESPH to review mineral oils for the purposes of the mixture calculation, given the revision of the aforementioned circular by ESPH, the group noted that "mineral oils" represented a large number of substances with widely differing characteristics (variable toxicity, properties and behaviours) and that a review of such substances would require significant time and effort. As such, the group requested ESPH to provide further clarification on the specific type/category of mineral oil of interest and suggested that the CONCAWE categorization of mineral oils may be a helpful reference for identifying the specific mineral oils to be considered.

5.5 Noting the feedback from the Secretariat indicating that the mineral oils of interest to ESPH were likely those used in lube oil additives, the group agreed that, should this be the case, it could potentially develop a profile (or several profiles) for these specific types of mineral oils. However, in order to do so, it would require the submission of data from industry and, if a profile for mineral oil(s) was to be developed for international use in relation to the IBC Code, the data should ideally come from a representative cross-section of companies from around the world.

Flammability

5.6 The Group recalled that at EHS 51, it had considered the use of the GESAMP Hazard Profile for chemical spill response. First responders confirmed that the addition of flammability and other properties in the GESAMP Hazard Profile, such as chemical reactivity, would be of significant value when responding to incidents involving hazardous materials. The group noted that it considered product flashpoint as part of its assessments, notably in the assignment of the E3 rating, but that such information was not currently captured in the GESAMP Hazard Profile. The group further noted that certain flammability properties were used by ESPH in the assignment of carriage requirements under chapter 21 of the IBC Code.

5.7 Taking the above into account, the group considered the possibility of adding a column to the GESAMP Hazard Profile to capture information on flammability. In discussing a possible way forward, the group noted that there were a number of properties associated with flammability, such as flashpoint, auto-ignition temperature and explosive/flammability range, and decided that more dialogue was needed to determine the most suitable to include in the hazard profile. The group therefore agreed to consider the matter in more detail intersessionally via correspondence and to revisit this topic at EHS 54.

Inhalation toxicity

5.8 The group noted that the draft revision of chapter 21 of the IBC Code included a direct reference to the rating on acute inhalation toxicity in column C3 of the GESAMP Hazard Profile. However, it was noted that this rating may be based on exposure to mists or mixed vapour/aerosols and should therefore not be used to manage the risk to vapour exposure only. The group observed that the revised chapter 21 offered the option of using the SVC ratio calculation method, which uses the LC₅₀ for inhalation of vapours, together with saturated vapour concentration (SVC) to assign carriage requirements consistent with a lower inhalation risk.

5.9 The group recalled that the assignment of carriage requirements under the IBC Code was generally based on the GESAMP Hazard Profile. Given that the hazard profile did not currently contain information on vapour toxicity, the group considered options for including such information in the future, noting that this would be needed for the purposes of the new SVC ratio calculation.

5.10 As a first effort to address these considerations, the group recalled that at EHS 51, it had developed a new notation whereby a hash mark is added to those product entries with a lower inhalation risk by vapour exposure than is indicated in column C3. However, noting that this was not sufficient and could not be used in the SVC ratio calculation, the group agreed to consider other possibilities within the GESAMP Hazard Profile for providing the information needed for the calculation.

5.11 One option considered was dividing the C3 ratings into sub-categories (similar to the A1 column) to provide ratings for exposure to both vapours and mists, where possible, based on the data submitted. Noting that more discussion was needed, the group agreed to progress the matter in more detail intersessionally and to revisit this topic at EHS 54.

"Inorg" rating under column A1 and A2

5.12 Bioaccumulation of inorganic substances cannot be assessed using the conventional n-octanol/water partition coefficient, as is the case for organic substances. The bioaccumulation of inorganic substances must instead be assessed based on actual bioconcentration studies. Inorganic substances, additionally, do not biodegrade. As a consequence, such substances have been identified as "Inorg" in columns A1a and A2.

5.13 The "Inorg" notation, however, cannot be used to categorize products under MARPOL Annex II, since specific ratings in columns A1a (0-5) and A2 (R or NR) are required. As a consequence, in 2011, IMO through the BLG Working Group (see BLG.1/Circ.33) determined that, for the purposes of regulation under MARPOL Annex II, a rating of "Inorg" as assigned by GESAMP/EHS, should be translated to "R", indicating that inorganic products, such as metals, would be considered as readily biodegradable.

5.14 The recently revised *Reports and Studies No. 64*, 2nd edition (2014) indicates that a sub-categorization of inorganic substances into readily soluble/dispersible and not readily soluble/dispersible is possible and that these properties may accordingly be used to further qualify the "Inorg" notation. As such, it provides an indication as to how the biodegradability of an inorganic substance might be processed for classification purposes.

5.15 The Group, having noted the submission by the United Kingdom to ESPH 21 (ESPH 21/6/1) flagging this issue and, in particular the substances identified as "Inorg" in annex 1 of the document, recognized that the proposed approach introduced in Reports and Studies No. 64, 2nd edition, may give the impression that some inorganic substances with low chronic toxicity are as hazardous as non-biodegradable (NR rated) substances and, conversely, that inorganic substances with significant chronic toxicity may be understood to be less hazardous because of the theoretical assignment as being readily biodegradable (R), for purposes of regulation.

5.16 Given time constraints and noting that more discussion was needed to fully scope out the issue, the group agreed to place the matter in abeyance for the time being, pending finalization of other work items, and to revisit the topic at a future meeting. In the interim, the group reconfirmed that the rating of "Inorg" would continue to be used in columns A1a and A2, as per the current practice.

6 CONSOLIDATION OF EXISTING DATA FILES

Alkanes

6.1 The group recalled that it had noted a number of inconsistencies in the ratings across the family of alkanes and alkenes over a number of sessions and, taking this into account, had initiated a review of the family of alkanes to ensure consistency in the ratings.

6.2 The group recalled also that it had confirmed the objective of this review was twofold; firstly to review the individual substances within the family of alkanes (and eventually the alkenes) to ensure the accuracy of the ratings in the individual GESAMP Hazard Profiles and secondly, to review any significant discrepancies in ratings between similar analogs against the data submitted.

6.3 The group noted that, due to time constraints, it had been unable to progress this work and agreed that its work on alkanes would continue at EHS 54.

Paraffins

6.4 Further to the work initiated at EHS 52 on the alkanes, the group agreed to review the entries of paraffins, as part of the family of alkanes, to ensure the same consistency in ratings.

6.5 Having considered the information submitted by the Chairman on the various paraffins, the group noted that the naming of the paraffin products set out in the Composite List and in the IBC Code were not consistent with the names used by the industry, e.g. CONCAWE. In addition, it was observed that the technical data available from industry for paraffins were not always consistent with the ratings assigned by the group, set out in the Composite List. Based on the information considered, the group concluded that there were four possible groupings for paraffins that could be correlated with the CONCAWE categories. Having concurred that further work was needed, the group agreed to revisit the topic at EHS 54. The group also welcomed the proposal by the Chairman to prepare a Chairman's paper for submission to ESPH 22 clarifying the issue, noting the work of ESPH on amendments to MARPOL Annex II related to the discharge of high-viscosity solidifying and persistent floating products.

7 COMMUNICATION AND PUBLICATION

7.1 The group noted the information presented regarding recent updates to the GESAMP website, as reported by the Chairman under agenda item 2, and thanked the GESAMP Secretariat for its efforts.

8 ANY OTHER BUSINESS

Membership issues

8.1 The group recalled that at EHS 52, it had agreed it was essential to maintain the expertise of the group, noting that some changes to the membership would be expected due to anticipated retirements in the coming years.

8.2 The Secretariat reported on its efforts to secure an additional toxicologist and welcomed Dr Bette Meek to the meeting as a guest expert.

8.3 The group underscored the ongoing need to ensure appropriate geographical representation and gender balance within the group of experts and encouraged the Secretariat and Chairman to take this into account when recruiting new experts.

Report on funding

8.4 The group noted the report on the outcome of the discussions of ESPH 21 with regard to the proposal made by EHS 52 for the introduction of a fee for re-assessments, as reported under agenda item 2, noting that it had invited GESAMP/EHS to continue monitoring the situation for the time being, with a view to revisiting the issue with ESPH in the future, if warranted.

8.5 The group also noted the financial information presented by the Secretariat, based on actual revenue and expenditures since the introduction of a fee in 2008, and other cost projections, based on possible future changes in the fees.

Provisional agenda and date of the next session

8.6 The group agreed to the draft provisional agenda for its next session, set out in annex 6 and agreed to the proposed scheduling of the meeting from 22 to 26 May 2017, noting that the next meeting would be held at IMO headquarters in London.

9 CONSIDERATION AND ADOPTION OF THE REPORT

9.1 The group adopted its report, noting that it would be circulated, together with the updated GESAMP Composite List, as PPR.1/Circ.3.

ANNEX 1

**LIST OF PARTICIPANTS ATTENDING THE FIFTY-THIRD SESSION
OF THE GESAMP/EHS WORKING GROUP**

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ANNEX 2

MATTERS ARISING FROM IMO

ESPH 21

Proposal for the introduction of a fee for the re-evaluation of products by the GESAMP/EHS Working Group

1 ESPH 21 recalled that the introduction of a fee for the re-evaluation of products had initially been discussed at BLG 11 during its broader discussions related to the introduction of a fee for GESAMP/EHS assessments of new products (BLG 11/WP.3, paragraph 7.7.4) that was later agreed by MEPC.

2 It recalled further that, at BLG 11, the ESPH Working Group had expressed the view that an identical fee (to the initial assessment fee of US\$ 6500) should be paid when a second evaluation was deemed necessary or, as a second option, that for a second evaluation, the fee might be reduced by half each time data on the same chemical was submitted for consideration by the GESAMP/EHS Working Group.

3 ESPH 21 considered the proposal set out in document ESPH 21/2/1 (Secretariat), reflecting discussions held during EHS 52 regarding the proposal for the introduction of a fee for the re-evaluation of products by the GESAMP/EHS Working Group.

4 As an example, ESPH 21 noted that at the last GESAMP/EHS meeting, some ten substances required virtually a full re-evaluation of their profiles, based on the submissions of updated information.

5 Having discussed the information presented and recalling past discussions at BLG on the introduction of a fee for the review or re-assessment of products, ESPH noted the concerns of GESAMP/EHS. It agreed that if the workload continued to grow, it would be appropriate to revisit this issue and to re-evaluate the position accordingly. In the meantime, however, the group was of the view that it was premature to initiate any action and therefore agreed to request the GESAMP/EHS Working Group to continue monitoring this issue and report back to the ESPH Working Group, as appropriate.

Inorg products

6 ESPH 21 considered document ESPH 21/6/1 (United Kingdom), which highlighted the need to take into account the decisions and interpretations related to the assignment of carriage requirements under the IBC Code and, where applicable, to incorporate these into the text of the revised chapter 21 to ensure consistency when assessing products and mixtures for inclusion in chapters 17 and 18 of the IBC Code and the MEPC.2/Circular.

7 In considering the information presented, ESPH noted that there were two separate issues that required its consideration. The first was with regard to the interpretation of biodegradability, where column A2 of the GESAMP Hazard was identified as "Inorg", which currently was taken to mean that the product was readily biodegradable, i.e. "R". Whilst it was noted that in practice this would not always be the case and that inorganic products could also be non-biodegradable, i.e. "NR", the group concurred that the interpretation, as set out in BLG.1/Circ.33, should remain unchanged.

8 The group, having reviewed the interpretations within the circular, noted that whilst many remained valid, others had been superseded by more recent amendments to the IBC Code, updated GESAMP/EHS information or new guidance contained in more recent circulars.

9 Having agreed on the value of retaining such interpretation information in a circular, the group agreed that the existing circular would need to be updated with all the new interpretations applied in the group's revision of chapters 17, 18 and 21 of the IBC Code and that this would be undertaken, subject to concurrence by PPR, once the amendments were finalized. The group further agreed that the interpretation used in its assessment of ethyl alcohol under agenda item 3 should also be recorded and retained for eventual inclusion in the revised circular.

10 The group also agreed that information related to the interpretations applied during assessments and a reference to BLG.1/Circ.33 should be included in its revision of MEPC.1/Circ.512 and possibly also in the revision of chapter 21. The group noted that it would continue to take these interpretations into account when evaluating products for inclusion in the MEPC.2/Circular and IBC Code and would keep records of any new interpretations applied, for inclusion in the revised circular.

MEPC 70

11 The group noted the adoption of recent amendments to the appendix to MARPOL Annex II, which updated the table summarizing the GESAMP Hazard Evaluation Procedure based on the recently published 2nd edition of *Report and Studies No. 64*.

ESPH WG at PPR 3

Sensitizers

12 The group considered document PPR 3/3/3 (Norway) providing a comparison of the new sensitizer sub-categories (Ss, Sr) against two different sets of draft criteria for the revised chapter 21 and proposed a number of amendments to the text of chapter 21 related to sensitizers.

13 The group recalled its discussions at ESPH 21 related to whether a product that had been identified as a skin sensitizer (Ss) should be considered strictly as Ss for the purposes of assigning carriage requirements, or also as a respiratory sensitizer (Sr), using a precautionary approach.

14 Having debated the two options, ESPH concluded that it would strictly follow the assigned sub-categories as established by GESAMP/EHS when assigning carriage requirements linked to sensitization, i.e. Ss, Sr or SsSr. The group further agreed that this approach would be applied to chapter 17 products, as part of the IBC Code amendment process, and also to all new products assessed by the group from this point forward. The group further agreed to modified wording in sections 2.7.3 and 2.7.4 of the draft chapter 21 to reflect this. The group also confirmed that all references to animal testing should be removed and be replaced by the more generic word "testing".

Component factor for mineral oils

15 Further to discussions initiated at ESPH 21, the group revisited the discussion of the component factor assigned to mineral oils for the purposes of the mixture calculation in connection with its revisions of MEPC.1/Circ.512, noting that the current assigned factor of 100 may be too high. Taking this into account the group agreed to invite the Sub-Committee to request GESAMP/EHS to undertake an assessment of mineral oil for the purpose of the mixture.

ANNEX 3

OUTCOME OF GESAMP 42

1 During the last 12 months the GESAMP Secretariat has been very busy. The website has been improved significantly. For the EHS Working Group (Working Group 1) a more comprehensive presentation including an up-to-date introduction has been put online (<http://www.gesamp.org/work-programme/workgroups/working-group-1>), together with reports from the 35th up to the 52nd sessions of GESAMP/EHS and a link to the 2nd edition of Reports and Studies 64 "Revised GESAMP Hazard Evaluation Procedure for Chemical Substances Carried by Ships". Also for other groups, in particular for the Ballast Water Working Group (Working Group 34), the introductions have been improved and important documents and guidelines are now offered online.

2 The 42nd session of GESAMP was hosted by the Intergovernmental Oceanographic Commission of UNESCO (IOC-UNESCO) in Paris, from 31 August to 3 September 2015. The report of this meeting has been published as Report and Studies 92 (<http://www.gesamp.org/publications/gesamp-reports-and-studies-91---100/report-of-the-92nd-session>).

3 At that meeting, the Chairman of the EHS Working Group reported on the publication of the 2nd Edition of *Reports and Studies 64*, the ongoing hazard assessment activities, as well as the membership and on funding issues. He highlighted the potential use of the GESAMP Hazard Profile during spillages and emergencies. GESAMP noted the challenges arising from the future direct reference to GESAMP ratings under the draft new Chapter 21 of the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), which may require more specific GESAMP hazard evaluations in the areas of acute inhalation toxicity and physical-chemical hazards (e.g. flammability). In a verbal statement, the Chairman explained the use of the GESAMP Hazard Profile for all regulations on environmental protection, on ship safety and on occupational health for defining minimum carriage requirements for bulk liquids.

4 Working Group 38 on the Atmospheric Input of Chemicals into the Ocean has prepared further scientific papers. The Paris meeting of GESAMP established Working Group 40 on "Marine geoengineering" which addresses aspects covered by the London Dumping Convention.

5 A very productive group is Working Group 40 "Sources, fate and effects of microplastics in the environment - a global assessment". It produced an extremely important booklet (*Reports and Studies 90*), which gives an overview on the facts and challenges. It includes a comprehensive list of relevant scientific papers on the topic. Part two of this global assessment, a report to inform the 2nd United Nations Environment Assembly, has been under review and will be published soon.

6 With respect to the challenges concerning the hazard and risk assessment of minerals, a workshop was held in Peru that resulted in *Reports and Studies 93* "Proceedings of the GESAMP International Workshop on the Impacts of Mine Tailings in the Marine Environment" which will be published soon. This was a result of a scoping activity and could result in a specialized GESAMP Working Group on the impacts of such activities in the future.

7 The activities of GESAMP were also been presented and discussed at the 29th Assembly of IMO (A 29/19(a)/1) including the work of Working Group 1. The Assembly expressed its appreciation for the scientific advice provided by GESAMP in support of the Organization's objectives.

8 The 43rd session of GESAMP will be hosted by UNEP in Nairobi in November 2016.

ANNEX 4

GESAMP HAZARD PROFILES FOR NEW SUBSTANCES SUBMITTED FOR EVALUATION TO GESAMP/EHS 53

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.

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3	
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							
Alkyl (C10-C15, C12 rich) phenol poly (4-12) ethoxylate (#)	2480	(5)	(4)	(4)	(NR)	(0)	NI	(0)	(0)	(2)	(2)	(1)				SD	2
	4056								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							
Cinnamaldenhyde	2485	1	(2)	(2)	R	2	0	1	1	(2)	2	1	Ss			SD	2
Cinnamaldenhyde	4061								CAS No	104-55-2							
Ethylene glycol (>75%)/sodium alkyl carboxylates/borax mixture (#)	2477	NI	(1)	(1)	R	1	NI	1	(1)	(2)	(1)	(1)	RT			D	3
	4006								CAS No								
Ethylene glycol (>85%)/sodium alkyl carboxylates mixture (#)	2475	NI	(1)	(1)	R	1	NI	1	(1)	(1)	0	0	T			D	2
	4005								CAS No								
Fish silage protein concentrate (containing 4% or less formic acid)	2487	NI	0	0	R	2	NI	(0)	(0)	(0)	(1)	(1)				Fp	2
	4062								CAS No								
Lauroamidopropyl betaine solution (#)	2479	(4)	(2)	(2)	R	(4)	(1)	(0)	(0)	(3)	(1)	(3)				D	3
	4055								CAS No	4292-10-8							
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								
Polyalkene sulphonic acid (C20-C28), sodium salt (#)	2481	(5)	(4)	(4)	(NR)	1	0	(1)	(0)	(2)	(2)	(2)				Fp	2
	4057								CAS No								
Potassium iodide	2484	Inorg	(0)	(0)	Inorg	1	0	0	0	0	0	0	T			D	2

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Potassium iodide	4060										7681-11-0					
Sodium hydroxide (30% or less)/Sodium aluminate (25% or less) solution (#)	2486	Inorg	(0)	(0)	Inorg	5	0	0	(0)	(3)	3	(3)		D		3
	3914															
Tallowamidopropylamine Oxide in propylene glycol (70% or less) (#)	2482	NI	(2)	(2)	(R)	(4)	(2)	(1)	(1)	(3)	(3)	(3)		D		3
	4058															

ANNEX 5

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).

ANNEX 5 - GESAMP/EHS COMPOSITE LIST
GESAMP Hazard Profiles

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
Acid mixtures (mixture of sulphuric and nitric acids)	497								CAS No								
Nitrating acid (mixture of sulphuric and nitric acids)	23	0	0	0	R	2	0	2	2	(2)	1	2	CMNSs			D	3
Acrylamide	70								CAS No		79-06-1						
Acrylamide solution (50% or less)	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								

**ANNEX 5 - GESAMP/EHS COMPOSITE LIST
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	
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	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
2475									CAS No								
Tetraethyl silicate monomer/oligomer (20% in ethanol)	1482	4	(3)	(3)	R	2	0	(0)	(0)	(2)	2	1				D	2
Alcohol(C12-C16) poly(20 and above)ethoxylates	78								CAS No								
Alcohol (C12-C16) poly(20+)ethoxylates	722	4	3	3	R	4	2	0	(0)	(3)	3	2				D	3
Alcohol(C6-C17)(secondary) poly(3-6)ethoxylate	81								CAS No								
Alcohol (C6-C17) (secondary) poly(3-6)ethoxylates	295	3	3	3	R	4	1	1	0	(3)	3	3				D	3
Alcohol(C6-C17)(secondary) poly(7-12)ethoxylate	80								CAS No								
Alcohol (C6-C17) (secondary) poly(7-12)ethoxylates	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 (C10-C18) poly (7) ethoxylate	2094	3	3	3	R	3	NI	1	0	(2)	(2)	(2)				D	2
Alcohol(C8-C11) poly(2.5-9)ethoxylates	2209								CAS No								
Alcohol (C9-C11) poly (2.5-9) ethoxylate	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(1-6)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-C16) poly(7-19)ethoxylates	2419	2	NI	2	R	3	NI	NI	NI	NI	NI	NI				NI	NI
Alcohol(C12-C14)poly(2)ethoxylate sulphate, sodium salt (*)	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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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								
Alkanes (C5-C7), linear and branched	2464	(5)	NI	(5)	(R)	(3)	(0)	0	0	0	2	0	NA			E	2
Alkanes (C5-C7), linear and branched	3799								CAS No								
Alkanes (C10-C17), linear and branched	2463	(5)	NI	(5)	R	0	1	0	0	(0)	0	0	A			F	3
Alkanes (C10-C17), linear and branched	3815								CAS No								
Alkanes (C10-C26), linear and branched	2392	0	NI	0	R	0	NI	0	0	(1)	1	1	A			F	3
Alkanes (C10-C26), linear and branched (flashpoint ≤60°C)	3736								CAS No	90622-53-0							
Alkanes (C10-C26), linear and branched	2392	0	NI	0	R	0	NI	0	0	(1)	1	1	A			F	3
Alkanes (C10-C26), linear and branched (flashpoint >60°C)	3562								CAS No	90622-53-0							
n-Alkanes (C9-C11)	2449	(5)	NI	(5)	R	0	(0)	0	0	(2)	1	0	A			F	3
n-Alkanes (C9-C11)	3867								CAS No								
n-Alkanes (C10-C20)	296	(5)	NI	(5)	(R)	(0)	(0)	(0)	(0)	(1)	(1)	(0)	A			F	3
n-Alkanes (C10+)	471								CAS No								
Alkane (C14-C17) sulphonic acid, sodium salt	334	2	2	2	R	3	1	0	0	(2)	2	2				D	2
Sodium alkyl (C14-C17) sulphonates (60-65% solution)	1153								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
Alkenoic acid ester, borated	3153								CAS No								

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Alkylamide, long chain, more than C10	1858	3	NI	3	(NR)	4	NI	0	(0)	(1)	0	1				Fp	2
Alkenyl (C1+) 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	3825								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								
Alkyl amine, alkenyl acid ester, mixture	1433	NI	NI	NI	NI	1	NI	(0)	(0)	NI	NI	NI				Fp	2
Alkyl(C8+)amine, Alkenyl (C12+) acid ester mixture	98								CAS No								
Alkylaryl phosphate mixtures (more than 40% Diphenyl tolyl phosphate, less than 0.02% ortho-isomers)	2267	4	4	4	R	4	4	0	0	(1)	1	0				S	1
Alkylaryl phosphate mixtures (more than 40% Diphenyl tolyl phosphate, less than 0.02% ortho-isomers)	280								CAS No								
Alkylated phenols (C4-C9)	2273	0	2	0	NR	1	0	1	0	(2)	1	1				Fp	2
Alkylated (C4-C9) hindered phenols	2575								CAS No								
Alkyl benzene distillation bottoms	300	0	2	2	NR	0	(3)	0	0	1	1	1				Fp	2
Alkyl benzene distillation bottoms	3106								CAS No								
Alkyl (C12-C15) benzene/indane/indene mixture	1872	0	4	4	NR	0	NI	0	0	0	0	2				FE	2
Alkylbenzene, alkylindane, alkylindene mixture (each C12-C17)	103								CAS No								
Alkylbenzene mixtures (containing at least 50% of toluene)	2303	(2)	(2)	(2)	(R)	(3)	(0)	0	0	(2)	2	2	ACMNR			FE	3
Alkylbenzene mixtures (containing at least 50% of toluene)	2909								CAS No								
Alkyl (C3-C4) benzenes	2206	(3)	NI	(3)	R	4	NI	0	0	(2)	(2)	(1)				FE	2
Alkyl (C3-C4) benzenes	91								CAS No								
Alkyl (C5-C8) benzenes	2207	5	4	4	(NR)	4	NI	0	0	(2)	(2)	(1)				F	2
Alkyl (C5-C8) benzenes	92								CAS No								
Alkyl benzenes, C9-C17 (straight or branched)	1783	0	4	4	NR	1	NI	0	(0)	(1)	(1)	(1)				F	1
Alkyl(C9+)benzenes	100								CAS No								
Alkylbenzenes mixture (containing less than 1% naphthalene)	2423	3	3	3	NR	4	NI	0	0	(2)	2	1	AC			F	3
Alkylbenzenes mixture (containing less than 1% naphthalene)	3600								CAS No								

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Alkylbenzenes mixtures (containing naphthalene)	2424	(3)	(3)	(3)	(NR)	(4)	NI	0	0	(1)	1	1	AC	F		3
Alkylbenzenes mixture (containing naphthalene)	3698								CAS No							
Alkylbenzenes mixtures (containing naphthalene)	2424	(3)	(3)	(3)	(NR)	(4)	NI	0	0	(1)	1	1	AC	F		3
Alkylbenzenes mixtures (containing naphthalene)	3966								CAS No							
Alkyl(C11-C13)benzenesulphonates, straight chain	301	3	3	3	R	3	1	1	(1)	(3)	2	3		FD		3
Alkylbenzene sulphonic acid, sodium salt solution	102								CAS No	42615-29-2						
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
Alkyldithiothiadiazole (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						

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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							
Alkyl (C10-C15, C12 rich) phenol poly (4-12) ethoxylate (#)	2480	(5)	(4)	(4)	(NR)	(0)	NI	(0)	(0)	(2)	(2)	(1)				SD	2
	4056								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								
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							

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Aminoethylethanolamine/Aminoethyldiethanolamine solution	74	Inorg	0	0	NR	1	0	(0)	(0)	(3)	(3B)	(2)	SsSr	D	3		
Aminoethyldiethanolamine/Aminoethylethanolamine solution	113								CAS No								
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	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							

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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								
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								
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 (l)	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
3,5-bis(1,1-dimethylethyl)-4-hydroxybenzenepropanoic acid, (C7-C9)-branched alkyl esters	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	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
3-(Triethoxysilyl)propylamine	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
Butyl alcohol (all isomers)	2216								CAS No	71-36-3							
Butanol	381	0	(0)	0	R	0	NI	0	0	0	2	3		NT		D	3
n-Butyl alcohol	474								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								
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							
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								

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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							
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, including:calcium bromide solution, calcium chloride solution and sodium chloride solution	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							
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								

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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								
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								
Camphor oil, white	1897	NI	NI	NI	NI	NI	NI	2	NI	(2)	1	NI		(T)		FE	2
Camphor oil	174								CAS No								
Caprolactam	436	0	NI	0	R	1	0	1	1	2	1	2				D	3
epsilon-Caprolactam (molten or aqueous solutions)	310								CAS No								
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								
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								
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								

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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							
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							

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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
o-Chlorotoluene	534								CAS No	95-49-8							
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							
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							
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								

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Coconut acid oil	2370	0	0	0	R	3	NI	(0)	(0)	(1)	(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)	(1)			Fp	2			
Coconut fatty acid distillate	3130								CAS No											
Coconut oil	503	0	NI	0	R	1	NI	0	(0)	(1)	0	(1)	(1)			Fp	2			
Coconut oil	2772								CAS No											
Coconut oil fatty acid	505	0	0	0	(R)	(3)	NI	0	(0)	(1)	(1)	(1)	(1)			Fp	2			
Coconut oil fatty acid	197								CAS No											
Coconut oil fatty acid methyl ester	506	5	0	0	R	0	NI	(0)	(0)	(0)	(0)	(1)	(1)			Fp	2			
Coconut oil fatty acid methyl ester	198								CAS No											
Copper salt of long chain(>C17) alkanolic acid (LOA)	2111	0	NI	0	(R)	2	NI	0	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	1			Fp	2			
Corn Oil	2781								CAS No											
Cotton seed oil	523	0	NI	0	R	(2)	NI	(0)	(0)	(1)	0	1	1			Fp	2			
Cotton seed oil	2783								CAS No											
Creosote (coal tar)	524	(4)	(4)	(4)	NR	4	(2)	1	0	2	2	1	1	CM	(T)	S	3			
Creosote (coal tar)	199								CAS No											
Creosote (wood tar)	525	NI	NI	NI	NR	5	NI	1	0	2	2	1	1	CM	(T)	SD	3			
Creosote (wood)	200								CAS No											
Cresol/Pheno/Xylenol mixture	2471	(2)	(2)	(2)	R	(3)	(1)	1	2	3	3B	3	3			SD	3			
Cresol/Pheno/Xylenol mixture	3673								CAS No											
Cresols (mixed isomers)	527	2	2	2	R	3	(1)	2	2	4	3A	3	3	T	SD	S	3			
Cresols (all isomers)	201								CAS No											
Cresylic acids, dephenolized	1875	2	2	2	R	3	0	(2)	(2)	(3)	(3A)	(3)	(3)	(T)	S	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	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	3			D	3			
Crotonaldehyde	204								CAS No											

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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-Cyclododecatiene	534	5	5	5	NR	4	NI	0	0	1	2	1	A	F	3	
1,5,9-Cyclododecatiene	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		FE	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						
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						

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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								
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
	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							

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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							
1,6-Dichlorohexane	593	3	NI	3	NR	3	NI	0	(0)	(0)	0	0				S	0
1,6-Dichlorohexane	19								CAS No	2163-00-0							
Dichloromethane	594	1	2	2	NR	1	0	1	0	0	2	2	C			SD	3
Dichloromethane	234								CAS No	75-09-2							
2,4-Dichlorophenol	596	3	2	2	NR	3	2	3	2	3	3	3		T		S	3
2,4-Dichlorophenol	30								CAS No	120-83-2							

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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	78-99-9						
1,2-Dichloropropane	606	2	1	1	NR	2	0	1	0	2	2	2			SD	2
1,2-Dichloropropane	9								CAS No	78-87-5						
1,3-Dichloropropane	607	2	1	1	NR	2	1	0	NI	NI	NI	NI			SD	NI
1,3-Dichloropropane	12								CAS No	142-28-9						
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	8003-19-8						
1,3-Dichloropropene	612	1	NI	1	NR	4	1	2	1	2	3	3	CSs		SD	3
1,3-Dichloropropene	13								CAS No	542-75-6						
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	75-99-0						
Di-(2-chloro-iso-propyl) ether	615	2	2	2	NR	2	NI	2	0	2	0	2			SD	2
2,2'-Dichloroisopropyl ether	25								CAS No	108-60-1						
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	111-42-2						
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						

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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
	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
Diethylenetriamine pentaacetic 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
	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						
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						

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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					
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							

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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							
Dimethylamine (40-50% aq.sol.)	661	0	NI	0	R	3	0	2	0	2	3B	3	Ss	NT	DE	DE	3
Dimethylamine solution (45% or less)	270								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	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	DE	3
Dimethylamine solution (greater than 45% but not greater than 55%)	271								CAS No	124-40-3							

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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						
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						

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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/ Diphenyl 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						
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							

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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							
Dodecene (all isomers)	720	5	NI	5	NR	4	NI	0	0	(2)	2	1	A			F	3
Dodecene (all isomers)	296								CAS No								
1-Dodecene	2473	5	NI	5	R	0	NI	0	0	1	2	1	A			F	3
1-Dodecene	3990								CAS No	112-41-4							
2-Dodecenyl succinic acid, dipotassium salt, solution	727	4	NI	4	NR	1	NI	(0)	(0)	NI	NI	NI				D	NI
Dodeceny/succinic 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							
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 sulphononic 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								

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n-Dodecyl mercaptan	2462	5	3	3	NR	5	NI	0	0	(3)	3	(3)	Ss		F	3
n-Dodecyl mercaptan	3743															
Dodecyl/octadecyl methacrylate (mixtures)	2116	(5)	NI	(5)	(NR)	(0)	NI	0	0	(1)	1	(1)			Fp	2
Dodecyl/Octadecyl methacrylate mixture	1717															
Dodecyl/pentadecyl methacrylate (mixture)	724	(5)	NI	(5)	(NR)	(0)	NI	0	(0)	(1)	(1)	(1)			Fp	2
Dodecyl/Pentadecyl methacrylate mixture	302															
Dodecyl phenol	725	0	4	4	NI	4	NI	0	0	(3)	3	2			Fp	3
Dodecyl phenol	301															
Dodecyl-, Tetradecyl-, Hexadecyl-dimethylamine mixture	2248	3	NI	3	R	5	2	1	(1)	(3)	3C	3			F	3
Alkyl (C12+) dimethylamine	2485															
Dodecylxylene	1763	0	NI	0	NI	0	NI	0	0	(1)	1	1			Fp	2
Dodecyl Xylene	306															
Epichlorohydrin	731	0	0	0	R	2	NI	2	2	3	3A	3	CSs		D	3
Epichlorohydrin	309															
Ethanol	732	0	NI	0	R	0	NI	0	0	0	1	2			D	2
Ethyl alcohol	315															
Ethanolamine	733	0	NI	0	R	2	0	1	1	3	3A	3			D	3
Ethanolamine	311															
Ethanoltriazine (aqueous solution)	2411	(0)	NI	(0)	R	3	NI	1	0	4	0	2	Ss		D	3
Ethanoltriazine (aqueous solution)	4022															
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	3687															
Ethoxylated long chain (>C16)alkyloxyalkylamine (LOA)	2103	5	NI	5	NR	1	NI	0	0	(3)	3	(3)			Fp	3
Ethoxylated long chain (C16+) alkyloxyalkylamine	2203															
Ethoxylated tallow amine (>95%)	2313	0	NI	0	NR	4	NI	1	(1)	3	2	3	Ss		Fp	3
Ethoxylated tallow amine (> 95%)	2959															
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															
Ethyl acetate	735	0	2	2	R	1	0	0	0	1	0	1			DE	2
Ethyl acetate	312															

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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	C			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	NI	2	NI	0	0	2	2	2				E	2
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						
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						

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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	T	D	2	
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						
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							

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Ethylene glycol (>75%)/sodium alkyl carboxylates/borax mixture (#)	2477	NI	(1)	(1)	R	1	NI	1	(1)	(2)	(1)	(1)	RT	D	3
	4006	CAS No													
Ethylene glycol (>85%)/sodium alkyl carboxylates mixture (#)	2475	NI	(1)	(1)	R	1	NI	1	(1)	(1)	0	0	T	D	2
	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	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	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	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	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	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	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	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	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													
N-Ethyl-2-methylamine	2228	0	NI	0	NR	2	NI	3	2	2	3A	3	D	D	3
N-Ethylmethylamine	2417	CAS No													
o-Ethyl phenol	788	2	NI	2	NI	(2)	NI	1	NI	NI	NI	NI	S	NI	NI
o-Ethylphenol	535	CAS No 90-00-6													

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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 acid (C8-C16) ethyl hexyl esters	2759								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, 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							
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								

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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 silage protein concentrate (containing 4% or less formic acid)	2487	NI	0	0	R	2	NI	(0)	(0)	(0)	(1)	(1)				Fp	2				
Fish solubles	4062								CAS No												
Fish solubles (water-based fish meal extract)	1509	NI	NI	NI	NI	NI	NI	(0)	(0)	(0)	(0)	(0)				NI	NI				
Fluorosilicic acid	351								CAS No												
Fluorosilicic acid	806	Inorg	0	0	Inorg	2	NI	2	(2)	4	3	3				D	3				
Fluorosilicic acid	2716								CAS No												
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												
Formaldehyde, polymer with isobutylenated phenol	2377	NI	NI	NI	NR	NI	NI	NI	NI	NI	NI	NI				Fp	NI				
Formaldehyde, polymer with isobutylenated phenol	1203								CAS No												
Formamide	808	0	NI	0	NR	1	NI	0	0	1	1	2	R			D	3				
Formamide	355								CAS No												
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												
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												
Furfural	812	0	NI	0	R	2	1	2	(2)	3	2	2	C			D	3				
Furfural	358								CAS No												
Furfuryl alcohol	813	0	NI	0	R	1	NI	2	2	3	2	2				D	2				
Furfuryl alcohol	359								CAS No												
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												

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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							
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							

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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						
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							
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						

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Hexamethylene glycol	847	0	NI	0	R	1	NI	0	0	(1)	0	1				D	1
Hexamethylene glycol	376								CAS No	629-11-8							
Hexamethylenimine	848	1	NI	1	NI	2	NI	3	1	2	2	2				FED	2
Hexamethylenimine	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 (all isomers)	383								CAS No	100-54-3							
Hexane	850	3	NI	3	R	4	NI	0	0	0	2	2	NA			E	2
Hexane	2683								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							
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 waxes	2278	0	NI	0	NR	0	0	0	0	(0)	1	1				Fp	2
Hydrocarbon waxes	2886								CAS No								

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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	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, more than 60%	2689								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 solutions (over 60% but not over 70% by mass)	390								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-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	583-91-5								
Icosa(oxypropane-2,3-diy)ls	2092	NI	NI	NI	NI	NI	NI	0	(0)	(2)	2	(2)					Fp	2
Icosa(oxypropane-2,3-diy)ls	2691								CAS No									
Icosa(oxypropane-2,3-diy)ls	2092	NI	NI	NI	NI	NI	NI	0	(0)	(2)	2	(2)					Fp	2
Icosa(oxypropane-2,3-diy)ls	392								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									
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	78-83-1								
Isobutyl formate	405	1	NI	1	NI	1	NI	0	(0)	0	(1)	(2)					E	2
Isobutyl formate	398								CAS No	542-55-2								
Isobutyl methacrylate	408	2	NI	2	NR	1	NI	0	0	0	2	2	Ss				FED	2
Isobutyl methacrylate	2673								CAS No	97-86-9								

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Isobutyric acid	419	0	NI	0	R	2	NI	2	2	(3)	3	3				E NI
Isobutyric acid	2459								CAS No	79-31-2						
Isodecanol	557	3	2	2	R	3	NI	0	0	0	2	1				Fp 2
Decyl alcohol (all isomers)	219								CAS No	25339-17-7						
Isononanol	1059	3	NI	3	NR	3	1	0	0	(2)	2	2				Fp 2
Nonyl alcohol (all isomers)	510								CAS No	2430-22-0						
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	63885-09-6						
Isooctanol	1076	3	NI	3	R	2	0	1	0	(2)	2	(2)				F 2
iso-Octanol	2675								CAS No	26952-21-6						
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						

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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							
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
Lauroamidopropyl betaine solution (#)	4055								CAS No	4292-10-8							

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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) propoxylamine ethoxylate	2380	3	0	3	NR	4	NI	1	(1)	(3)	3	(3)				D	3
Alkyl(C12-C16) propoxylamine 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								
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							

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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 sulphionate (C11-C50) (LOA)	1967	0	NI	0	NR	0	NI	0	0	(2)	1	2				Fp	2
Magnesium long-chain alkaryl sulphionate (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						
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						
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 - alkoxypoly (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								

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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						
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
Isoamyl alcohol	396								CAS No	123-51-3						
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						
Methyl butenol	967	0	NI	0	R	2	NI	1	0	(2)	2	2			D	2
Methylbutenol	458								CAS No	556-82-1						

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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						
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						

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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								
Methyl naphthalenes	1999	4	NI	4	(NR)	(4)	NI	1	0	(2)	1	1		T	F	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	F	3
alpha-Methylstyrene	107								CAS No	98-83-9							

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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							
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 (70% and over)	498								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 (less than 70%)	499								CAS No	7697-37-2						

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Nitriofluoroacetic acid, trisodium salt	1030	0	0	NI	0	R	1	0	1	(0)	0	1	1	CMR	D	3
Nitriofluoroacetic acid, trisodium salt solution	500								CAS No	5094-31-3						
Nitroethane	1037	0	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						
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							

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1-Nonene	1060	4	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	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	5	NI	5	R	3	NI	(0)	(1)	(1)	(1)				F	1
Nonyl methacrylate monomer	511								CAS No		2696-43-7						
Nonyl phenol	1062	5	4	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	4	NI	4	NR	3	1	0	0	(2)	2	1			D	2
Nonylphenol poly(4+)ethoxylate	513								CAS No								
Nonyl(C6-C12)phenol poly(4-12)ethoxylate	1063	4	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	5	NR	0	3	0	0	0	0	0			F	1
Octamethylcyclotetrasiloxane	3633								CAS No								
Octane	1072	5	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	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	3	NI	3	R	2	0	1	0	(2)	2	2			Fp	2
1-Octanol	2676								CAS No		111-87-5						
1-Octanol	1075	3	3	NI	3	R	2	0	1	0	(2)	2	2			Fp	2
Octanol (all isomers)	540								CAS No		111-87-5						
Octene (all isomers)	1079	4	4	NI	4	NR	3	NI	0	0	0	2	1	A		FE	2
Octene (all isomers)	541								CAS No								
Octyl acetate	1080	3	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	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	3	NR	5	NI	1	0	(1)	1	0	Ss		F	3
n-Octyl mercaptan	3742								CAS No								

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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	(0)	0	0			Fp	2
Olefins (C13+, all isomers)	547								CAS No							
alpha-Olefins (C6-C18),mixture	2030	(5)	NI	(5)	NR	(4)	NI	(0)	(0)	(2)	(2)	(1)	A		FE	2
alpha-Olefins (C6-C18) mixtures	108								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							

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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											
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	1086	0	NI	0	R	0	NI	(0)	(0)	(1)	1	1			Fp	2				
Paraffin wax	556								CAS No											
Paraldehyde	1098	0	0	0	NR	0	NI	1	0	0	1	3			D	3				
Paraldehyde	557								CAS No											
Pentachloroethane	1099	3	2	2	NI	3	1	1	(1)	1	(1)	(1)	CT		S	3				
Pentachloroethane	558								CAS No											
1,3-Pentadiene	1102	2	NI	2	NR	2	NI	0	0	0	1	(2)			E	2				
1,3-Pentadiene	14								CAS No											

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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
Pentaethylenhexamine	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														
1,5-Pentanediol 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														
Petrolatum	2244	0	NI	0	NR	0	NI	0	0	2	1	1		Fp		2
Petrolatum	565	CAS No														
Petroleum wax	1122	0	NI	0	NR	0	NI	0	0	(0)	0	0		Fp		2
Waxes	741	CAS No 8002-74-2														
Phenol	1124	1	2	2	R	3	0	2	2	(3)	3	3		NT		3
Phenol	566	CAS No 108-95-2														

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Phenylxylethane	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								
Phosphoric acid	1138	0	NI	0	Inorg	1	NI	1	1	3	3	3				D	3
Phosphoric acid	567								CAS No		7664-38-2						
Phosphorus (elemental yellow)	1139	Inorg	(3)	(3)	Inorg	6	4	0	0	0	2	1				S	2
Phosphorus, yellow or white	568								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
	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								

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Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether	1152	1	NI	1	R	1	0	0	0	0	2	2				D	2
	576								CAS No								
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether	2254	1	NI	1	NR	2	1	0	0	0	2	2				D	2
	575								CAS No								
Poly(2-8)alkylene glycol monoalkyl (C1-C6) ether acetate	2468	0	NI	0	NR	2	NI	NI	NI	NI	NI	NI				D	NI
	3931								CAS No								
Poly alkyl methacrylate (C1-C20) (LOA)	1984	(5)	NI	(5)	NR	0	NI	0	0	0	0	0				Fp	2
	2189								CAS No								
Polyalkyl (C10-C20) methacrylate	2201	0	0	0	NR	0	0	0	0	(1)	1	1	A			Fp	3
	2188								CAS No								
Poly alkyl(C10-C18) methacrylate/ethylene-propylene copolymer mixture	1136	Inorg	0	0	Inorg	0	NI	(0)	(0)	(1)	(0)	(1)				D	1
	584								CAS No	1327-41-9							
Polyaluminium chloride (sol.)	1154	0	NI	0	(NR)	(0)	(0)	(0)	(0)	(0)	(0)	(0)				Fp	2
	585								CAS No	9003-29-6							
Polybutene	2055	5	NI	5	NR	0	NI	(0)	(0)	(0)	0	(0)				Fp	2
	586								CAS No								
Polybutenylsuccinimide in oil	2246	4	4	4	NR	(4)	NI	(1)	(1)	(2)	(1)	(1)	CM			S	3
	574								CAS No								
Poly(2+)cyclic aromatics	1863	0	NI	0	NR	3	1	0	(0)	(1)	1	0				D	1
	572								CAS No								
Polyether, borated	1975	0	NI	0	NR	1	NI	0	(0)	(0)	0	0				Fp	2
	587								CAS No								
Polyether (molecular weight 2000+) (LOA)	1991	(5)	NI	(5)	NR	3	0	0	(1)	(3)	(2)	(3)	Ss			Fp	3
	591								CAS No								
Polyether (molecular weight 1350+)	1157	0	NI	0	NR	0	NI	0	0	0	1	1				D	1
	589								CAS No	25322-68-3							
Polyethylene amines / paraffin mixtures	1158	0	NI	0	NR	0	NI	0	0	(1)	1	(1)				D	1
	590								CAS No	24991-55-7							
Polyethylene polyamines (more than 50% C5 -C20 paraffin oil)	2395	NI	0	0	R	1	NI	0	0	(0)	0	0				D	0
	3501								CAS No								

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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							
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
Polyethylene 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		NI
Polyolefin amide alkeneamine/molybdenum oxysulphide mixture	603								CAS No							

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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							
Polyolefinamine (C28-C250) (LOA)	2107	0	NI	0	NR	2	NI	0	(0)	(2)	2	(1)				Fp	2
Polyolefinamine (C28-C250)	609								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 in aromatic solvent	611								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								
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								

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Polysiloxane	1161	NI	4	4	NI	2	NI	0	(0)	(0)	0	0				F	1
Dimethylpolysiloxane	275								CAS No								
Poly (tetramethylene) ether glycol (mw 600-3000)	2147	2	NI	2	NR	3	NI	0	0	(0)	0	(0)				FD	0
Poly(tetramethylene ether) glycol (mw 600-3000)	2540								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 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								
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						

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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	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							
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							

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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							
Pyrolysis gasoline	2271	(4)	(3)	(3)	(R)	(3)	(1)	1	0	(2)	2	2	TCM	FE	3	
Pyrolysis gasoline (containing benzene)	1990								CAS No							
Rapeseed oil (high erucic acid; containing less than 4% free fatty acids)	2315	0	NI	0	R	(2)	NI	(0)	(0)	(0)	(1)	(1)		Fp	2	
Rapeseed oil	3045								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							
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							

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Silica slurry	1514	Inorg	0	0	Inorg	0	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	0	NI	0	0	1	1				D	1
Sodium acetate solutions	639								CAS No	127-09-3							
Sodium aluminate (solution)	1234	Inorg	0	0	Inorg	NI	NI	(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	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	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	CMSSr			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
Sodium dodecyl sulphate (*)	3869								CAS No								
Sodium hydrogen sulphide/Ammonium sulphide(mixture)	1253	Inorg	0	0	Inorg	3	NI	1	1	0	2	2				D	2
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	1	1	1	2	2				D	2
Sodium hydrosulphide solution (45% or less)	652								CAS No	16721-80-5							

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Sodium hydrogen sulphite, solutions	1251	Inorg	0	0	Inorg	1	NI	0	(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	5	0	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 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								
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							

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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							
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							

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Sulphuric acid	1280	0	NI	0	Inorg	2	NI	0	(0)	3	3C	3	C			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	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, 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								
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 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							

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																	(2)	(R)	(4)	(2)	(1)	(1)	(3)	(3)	(3)	D	3
Tallowamidopropylamine Oxide in propylene glycol (70% or less) (#)	2482	NI	(2)	(2)	(R)	(4)	(2)	(1)	(1)	(3)	(3)	(3)															
	4058																										
Tallow fatty acid	1289	0	NI	0	R	0	NI	0	(0)	(0)	(0)	(0)							Fp	2							
Tallow fatty acid	684																										
1,1,2,2-Tetrachloroethane	53	2	2	2	NR	3	0	2	0	2	2	2								SD	2						
Tetrachloroethane	687																										
1,1,2,2-Tetrachloroethylene	1295	3	2	2	NR	(3)	2	0	0	0	2	1									S	3					
Perchloroethylene	564																										
Tetrachloromethane	1296	2	2	2	NR	3	0	0	0	0	1	1									S	3					
Carbon tetrachloride	178																										
Tetradecanoic acid (Myristic acid)	1298	5	NI	0	R	0	NI	0	(0)	(1)	(1)	(1)										Fp	2				
n-Tetradecanoic acid	491																										
Tetradecanoic acid (Myristic acid)	1298	5	NI	0	R	0	NI	0	(0)	(1)	(1)	(1)											Fp	2			
Fatty acid (saturated C13+)	347																										
Tetraethylene glycol	1301	0	NI	0	NR	0	NI	0	0	0	1	1											D	1			
Tetraethylene glycol	688																										
Tetraethylene pentamine	1302	0	NI	0	NR	3	NI	0	2	(3)	3	3											Ss	D	3		
Tetraethylene pentamine	689																										
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																										
Tetrahydrofuran	1304	0	NI	0	R	0	NI	0	(0)	0	1	2													DE	2	
Tetrahydrofuran	690																										
Tetrahydronaphthalene	1305	3	3	3	NR	3	NI	0	0	(2)	2	0														F	2
Tetrahydronaphthalene	691																										
1,2,3,4-Tetramethylbenzene	1307	4	NI	4	NI	4	NI	0	(0)	(1)	1	(1)														F	1
Tetramethylbenzene (all isomers)	692																										
Tetrapotassium pyrophosphate	2400	Inorg	0	0	Inorg	1	NI	0	NI	NI	NI	NI														D	NI
Tetrapotassium pyrophosphate	3635																										
Thixatrol plus	2210	5	NI	5	R	3	NI	0	0	0	1	1														S	1
Thixatrol Plus	2699																										

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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	
Tolenediamine	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							
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							

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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						
Triethyl acetate	1768	5	NI	5	NI	0	NI	0	(0)	(2)	2	2		F	2	
Triethyl 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						
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-ylethylamine mixtures (#)	2456	0	NI	0	NR	2	NI	0	2	(3)	3	3	Ss	D	3	
Triethylenetetramine/2-piperazine-1-ylethylamine mixtures (#)	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						

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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
Triglycerides, C16-C18 and C18 unsaturated, reclaimed (UCO)	2470	(5)	NI	(5)	R	(0)	(0)	(0)	(0)	(1)	(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					
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					
Trimethylolpropane 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					

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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 solution	726								CAS No	57-13-6						
Urea	1384	0	0	0	R	1	NI	0	0	(1)	1	(1)		D	1	
Urea	2627								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	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							

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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
Vinyltoluene	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								
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								

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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 salts)	307								CAS No	7646-85-7							

ANNEX 6

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

- 1 Adoption of the agenda
 - 2 Outcome of other bodies
 - 3 Evaluation of new substances
 - 4 Correspondence with industry/government
 - 5 Classification issues
 - 6 Consolidation of existing data files
 - 7 Communication and publication
 - 8 Any other business
 - 9 Proposed provisional agenda for EHS 55
 - 10 Consideration and adoption of the report
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