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PPR.1/Circ.13
30 June 2023

HAZARD EVALUATION OF SUBSTANCES TRANSPORTED BY SHIPS

Report of the sixtieth session of the GESAMP Working Group on the Evaluation of the Hazards of Harmful Substances Carried by Ships

The report of the sixtieth session of the GESAMP Working Group on the Evaluation of the Hazards of Harmful Substances Carried by Ships (GESAMP/EHS Working Group), held from 9 to 12 May 2023, is attached.

Any comments or questions should be addressed to:

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WORKING GROUP ON THE EVALUATION OF THE HAZARDS OF HARMFUL SUBSTANCES CARRIED BY SHIPS
60th session
Agenda item 9

EHS 60/9
30 June 2023
ENGLISH ONLY

REPORT OF THE SIXTIETH SESSION

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1 INTRODUCTION

1.1 The sixtieth session of the GESAMP Working Group on the Evaluation of the Hazards of Harmful Substances Carried by Ships (GESAMP/EHS Working Group) was held at the IMO headquarters, London from 9 to 12 May 2023 and was chaired by Mr. Richard Luit. The list of experts who attended the meeting is set out in annex 1. The Chair of the ESPH Technical Group was also present as an observer.

1.2 Having reviewed the agenda and provisional timetable, the Group adopted both, without amendment.

2 OUTCOME OF OTHER BODIES

2.1 The Group noted that the following meetings of relevance had taken place since the fifty-ninth session of the GESAMP/EHS Working Group (EHS 59):

.1 the forty-ninth session of GESAMP, which took place from 5 to 9 September 2022;

.2 the twenty-eighth intersessional meeting of the Technical Group on the Evaluation of Safety and Pollution Hazards of Chemicals (ESPH 28), which took place from 10 to 14 October 2022 (PPR 10/3); and

.3 the tenth session of the PPR Sub-Committee (PPR 10), which took place from 24 to 28 April 2023 (PPR 10/18).

2.2 The Group noted the information presented by the Secretariat on the outcome of the above-mentioned meetings on matters of relevance to the work of the GESAMP/EHS Working Group (see annex 2).

Estimation of acute dermal toxicity

2.3 The Group noted that, with regard to the estimation of acute dermal toxicity, ESPH 28 had noted the three potential options that GESAMP/EHS could pursue in cases where the dermal toxicity (C2) rating had been assigned by direct extrapolation from acute oral toxicity information, and where the product had been rated for corrosive or irritating properties, namely:

.1 continuing with the practice of estimating the C2 rating based solely on acute oral toxicity information in the absence of dermal toxicity test data; and for substances where the D1 and/or D2 ratings were greater than zero, noting in the report that the C2 rating was based on oral acute toxicity and did not take into account the potential for irritation or corrosion; or

.2 developing an extrapolation method for acute dermal toxicity in a similar fashion to the GESAMP acute inhalation toxicity extrapolation method; or

.3 assigning "NI" for C2 in the absence of acute dermal toxicity test data and providing advice to the ESPH Technical Group on how the "NI" rating should be interpreted in combination with the C1, D1 and D2 ratings.

2.4 In this context, the Group noted that ESPH 28 had briefly discussed the three options proposed by EHS 59 and had expressed a preference for the third option if GESAMP/EHS was able to develop advice for subsequent inclusion in a revision of PPR.1/Circ.7, and agreed to further consider the matter under agenda item 5 (Classification issues).

Creosote (coal tar)(amended)

2.5 With regard to the carriage of "Creosote (coal tar)", the Group noted that, following the outcomes of GESAMP/EHS 59 regarding the request for re-evaluation of the A1 (bioaccumulation) and B1 (acute aquatic toxicity) ratings for "Creosote (coal tar)", and the subsequent confirmation of the existing ratings for the product by EHS 59, ESPH 28 had:

.1 considered document ESPH 28/3/12 (CEFIC), proposing that the Technical Group either:

.1 assign Ship Type 2 rather than Ship Type 1 due to both the additional environmental impacts of the more stringent requirements for Ship Type 1 (e.g. energy requirements for prewash, empty return trips, and inefficient use of existing tonnage and commercial reasons (i.e. a lack of available Ship Type 1 transatlantic vessels to meet demand); or

.2 agree to ship "Creosote (coal tar)" as a MARPOL Annex I product due to its biological origin in a manner analogous to the decision made at BLG 14 regarding shale oil being treated as a MARPOL Annex I cargo;

.2 considered the following three options for the carriage of "Creosote (coal tar)":

.1 not to deviate from the criteria in chapter 21 of the IBC Code and retain the assignment of ship type 1 to "Creosote (coal tar)" as listed in chapter 17 of the IBC Code, taking into account that the GHP of the product had not been amended by GESAMP/EHS 59;

.2 apply expert judgement in accordance with paragraph 21.1.3 of the IBC Code to assign ship type 2 to "Creosote (coal tar)" taking into account the information in document ESPH 28/3/12; or

.3 agree that "Creosote (coal tar)" should be shipped under the provisions of MARPOL Annex I;

.3 following extensive discussion, agreed to recommend to the PPR Sub-Committee that the assignment of ship type 2 (in combination with Pollution Category X) would be appropriate for "Creosote (coal tar)" in order to avoid the potential negative environmental impacts associated with the need for energy-intensive hot water tank cleanings due to the compatibility of this cargo with heavy oil (black) products, as well as other considerations; and

.4 agreed that the following justification for inclusion in a revision of PPR.1/Circ.7 would be recorded:

"Taking into account the considerations on safety and environmental protection aspects (see PPR 10/3, paragraphs 3.56 to 3.58 and 3.60), it was agreed that a ship type 2 would be appropriate for carrying this product based on expert judgement."

2.6 In this connection, the Group also noted that subsequently, PPR 10 had:

.1 concurred with the recommendation of ESPH 28;

.2 agreed for the expiry date associated with "Creosote (coal tar) (amended)" to be changed to "none" in the next edition of the MEPC.2/Circular (due to be issued on 1 December 2023);

.3 confirmed that the carriage requirements for "Creosote (coal tar) (amended)" would replace the carriage requirements for "Creosote (coal tar)" in the next revision of chapter 17 of the IBC Code;

.4 a consequential revision to PPR.1/Circ.7 would be required in accordance with paragraph 21.1.3 of the IBC Code; and

.5 the following justification for inclusion in a revision of PPR.1/Circ.7 would be recorded for "Creosote (coal tar)":

> "Taking into account the considerations on safety and environmental protection aspects (see PPR 10/3, paragraphs 3.56 to 3.58 and 3.60), it was agreed that a ship type 2 would be appropriate for carrying this product based on expert judgement."

2.7 Having noted the above, the Group further noted that the decisions of PPR 10 with regard to "Creosote (coal tar)" were subject to concurrence by MEPC 80, scheduled to be held from 3 to 7 July 2023.

3 EVALUATION OF NEW SUBSTANCES

3.1 The Group recalled that when submitting new substances for evaluation by the GESAMP/EHS Working Group, a full set of data, addressing all the relevant information requirements set out in the GESAMP/EHS Product Data Reporting Form, is 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 hazard 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[1], which had been submitted for evaluation to this session:

.1	Alcohols, C12-14 ethoxylated propoxylated	EHS 2566
.2	Carboxylated phosphonated sodium allyl sulphonate polymer	EHS 2567
.3	Acrylated EVAC polymer (MW 50,000 – 60,000) in ethylhexanol and diethylene glycol	EHS 2568
.4	Polyethylene glycol monooleate	EHS 2569
.5	Dimethyl carbonate	EHS 2570
.6	Dodecanoic acid, 1-methylethyl ester	EHS 2571
.7	Pongamia/Karanja seed oil crude	EHS 2572

[1] The names of the substances shown in the list directly under paragraph 3.2 are in accordance with the submissions prior to GESAMP/EHS 60. The names agreed by GESAMP/EHS following consultation with the submitters are shown from paragraph 3.4 onwards and in annex 3.

3.3 The Group, in assessing the submitted products, made observations and reached conclusions as set out in the ensuing paragraphs. The resultant hazard profiles assigned by the Working Group for inclusion in the GESAMP Composite List are set out in annex 3.

EHS 2566 Alcohols, C12-14 ethoxylated propoxylated

3.4 Having considered the submission and the data provided, the Group confirmed the name of the substance as submitted and assigned a GESAMP Hazard Profile accordingly.

A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3
(0)	NI	(0)	R	3	1	0	(0)	(0)	NI	(0)	(1)	(3)		1	FD	3

EHS 2567 Carboxylated phosphonated sodium allyl sulphonate polymer

3.5 Having considered the submission and the data provided, the Group confirmed the name of the substance as submitted. Recalling that the molecular weight of a polymer influences its physical and (eco)toxicological properties, the Group noted that the molecular weight of the assessed product ranged from 2,000 to 2,500. The resulting GESAMP Hazard Profile is set out below.

A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3
0	NI	0	NR	0	0	(0)	(0)	(3)	NI	(3)	(3)	(3)	Ss	2	D	3

EHS 2568 Acrylated ethylene vinyl acetate polymer in ethylhexanol and diethylene glycol
Submitted as: Acrylated EVAC polymer (MW 50,000 – 60,000) in ethylhexanol and diethylene glycol

3.6 Having considered the submission and the data provided, the Group confirmed that the solvents should be included in the product name as they influenced some of the ratings and agreed that "Acrylated ethylene vinyl acetate polymer in ethylhexanol and diethylene glycol" would be a more appropriate name for entry into the Composite List.

3.7 Recalling that the molecular weight of a polymer influences its physical and (eco)toxicological properties, the Group noted that the molecular weight of the assessed product ranged from 50,000 to 60,000. The resulting GESAMP Hazard Profile is set out below.

A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3
(1)	NI	(1)	NR	2	0	0	0	(2)	NI	(2)	0	2	Ss	2	Fp	3

EHS 2569 Polyethylene glycol monooleate

3.8 Having considered the submission and the data provided, the Group confirmed the name of the substance as submitted.

3.9 During consideration, the Group noted that the molecular weight of the product ranged from 898 to 943, and due to the polymeric nature of the substance, applied expert judgement to assign a bioaccumulation rating of (0) (i.e., A1a = (0)). The Group further noted that the

carcinogenic monomer ethylene oxide is present in very low concentrations (< 0.005%), but that this is below the 0.1% concentration limit for carcinogenicity hazard classification of the product in accordance with GESAMP Reports and Studies No.102. Therefore, no notation was assigned to column D3. The resulting GESAMP Hazard Profile is set out below.

A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3
(0)	NI	(0)	R	3	0	0	0	(0)	NI	(0)	0	0		1	D	0

EHS 2570 Dimethyl carbonate

3.10 Having considered the submission and the data provided, the Group confirmed the name of the substance as submitted and assigned a GESAMP Hazard Profile accordingly.

A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3
(0)	NI	(0)	R	1	0	0	0	NI	2	2	0	0		4	D	2

EHS 2571 Dodecanoic acid, 1-methylethyl ester

3.11 Having considered the submission and the data provided, the Group confirmed the name of the substance as submitted and assigned a GESAMP Hazard Profile accordingly.

A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3
5	NI	5	R	0	(0)	0	(0)	(2)	NI	(2)	0	0		1	F	2

EHS 2572 Pongamia/Karanja seed oil, crude
Submitted as: Pongamia/Karanja seed oil crude

3.12 Having considered the submission and the data provided, the Group agreed that "Pongamia/Karanja seed oil, crude" would be a more appropriate name for entry into the Composite List. During consideration of the substance, the Group noted that the ecotoxicity ratings were assigned based on read-across and by applying GESAMP mixture calculation rules to 0.5% pongamol (i.e., A1 = (2), B1 = (2) and B2 = (1) for the substance, while pure pongamol would have ratings of A1 = 4, B1 = 4 and B2 = 3).

3.13 The resulting GESAMP Hazard Profile is set out below.

A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3
(2)	NI	(2)	R	(2)	(1)	(0)	(0)	(1)	NI	(1)	(1)	(1)		1	Fp	2

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

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

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

4.3 The Group further recalled that at EHS 57, it had considered new information that had been submitted relating to "Potassium chloride (less than 26%)" (EHS 2345) and "Sodium bromide solution (less than 50%)" (EHS 2387), but because the existing data files for these two EHS entries were inaccessible, the Group had agreed to conduct a full re-evaluation at its next physical meeting when the existing data files were accessible to the Group.

4.4 In this context, the Group reviewed the data files for "Potassium chloride (less than 26%)" (EHS 2345) and "Sodium bromide solution (less than 50%)" (EHS 2387) and confirmed the current GHPs.

EHS 2384 Cesium formate solution
Current name in the Composite List: Cesium formate, drilling brines

4.5 The Group agreed to change the name of the product in the Composite List to "Cesium formate solution" in order to have consistent naming of various inorganic salt solutions.

Remaining re-evaluations from GESAMP/EHS 59

4.6 The Group recalled that at its previous session, it had agreed to review the files for "Coal tar pitch (molten)" (EHS 491), "Coal tar" (EHS 499), "Coal tar naphtha" (EHS 500) and "Creosote (coal tar) C8-C22, MW 116-278" (EHS 2514), with the aim of confirming or revising the GHPs, particularly the A1 ratings.

4.7 During a review of the files for these four products, the Group noted that EHS 44 and EHS 45 had thoroughly reviewed the files for "Coal tar pitch (molten)" (EHS 491), "Coal tar" (EHS 499) and "Coal tar naphtha" (EHS 500) and confirmed the A1 ratings. Further, the Group noted that "Creosote (coal tar) C8-C22, MW 116-278" (EHS 2514) had been assessed recently (GESAMP/EHS 55).

4.8 Having recognized the work done by previous sessions of GESAMP/EHS on these four products, and in light of the substantial workload of the Group, the Group agreed that a more detailed review of these files was not necessary at this stage unless there was a future request for re-evaluation of any of these products.

5 CLASSIFICATION ISSUES

Estimation of acute dermal toxicity

5.1 With regard to the estimation of acute dermal toxicity, the Group recalled that:

.1 information on acute dermal toxicity is sometimes lacking in submissions to the Group, partly due to the restriction in animal testing of corrosive substances for ethical reasons;

.2 it had noted at recent sessions that according to the GHS and the methodology described in GESAMP Reports and Studies No. 102, corrosive or irritating properties are not reflected in the acute dermal toxicity rating in column C2;

.3 EHS 59 had agreed that in cases where acute dermal toxicity ratings were estimated solely on acute oral toxicity information in the absence of acute dermal toxicity test data and when the D1 and/or D2 ratings were greater than zero, a note would be included in the report to flag that the C2 rating does not take into account the potential for irritation or corrosion; and

.4 EHS 59 had listed three potential options that GESAMP/EHS could pursue in this context:

.1 continuing with the practice of estimating the C2 rating based solely on acute oral toxicity information in the absence of dermal toxicity test data; and for substances where the D1 and/or D2 ratings were greater than zero, noting in the report that the C2 rating was based on oral acute toxicity and did not take into account the potential for irritation or corrosion;

.2 developing an extrapolation method for acute dermal toxicity in a similar fashion to the GESAMP acute inhalation toxicity extrapolation method; or

.3 assigning "NI" for C2 in the absence of acute dermal toxicity test data and providing advice to the ESPH Technical Group on how the "NI" rating should be interpreted in combination with the C1, D1 and D2 ratings.

5.2 The Group further recalled that under agenda item 2, it had noted the discussion of ESPH 28 regarding the three options above and that ESPH 28 had expressed a preference for the third option if GESAMP/EHS was able to develop advice for subsequent inclusion in a revision of PPR.1/Circ.7.

5.3 With regard to the C2 rating, the Group considered how best to provide the ESPH Technical Group advice on interpreting an "NI" assignment, and in particular, if this advice should be to estimate C2 based solely on acute oral toxicity rating (i.e., C2 = C1). During discussion, however, the Group noted several concerns with this approach, including the differences in thresholds for classification used for C1 and C2. The Group also noted that providing alternate rationales for an estimated dermal toxicity rating, had been used in several evaluations, and in many cases, were preferable to estimating C2 based solely on acute oral toxicity data.

5.4 In light of the above, the Group agreed that its preferred approach in the absence of acute dermal toxicity data would be to assign an estimated C2 rating on a case-by-case basis to substances wherever possible, to enable evaluations by the ESPH Technical Group. This estimated rating would follow careful consideration of all information provided relevant to dermal toxicity, for example, any provided rationales in conjunction with acute oral toxicity data and, if appropriate, D1 and D2 ratings. The Group also agreed that it would continue its practice of noting in its report any relevant information that provided additional context for the estimated C2 rating.

Vegetable oils used as feedstock for biofuel production

5.5 The Group recalled that in light of recent submissions of products used mainly as feedstock for biofuel production, EHS 59 had:

.1 briefly considered whether it would be appropriate to develop generic entries covering groups of similar vegetable oil products, should there be an increase in the requests to evaluate vegetable oil products as a result of the expected growth in demand for biofuels and the associated shipment of feedstock oils for the production of biofuels;

.2 recalled that in 2003, the Chair of GESAMP/EHS at the time had informed ESPH 9 that GESAMP would, in future, only evaluate additional vegetable oils on the basis of data provided; and

.3 agreed to defer further discussions regarding whether grouping vegetable oils in the Composite List was appropriate or not until its next session.

5.6 Having noted that there had not been a noticeable increase in requests to evaluate vegetable oils used as feedstock for biofuel production, the Group agreed that at this stage, there was no need to further consider the issue until such time as many submissions of this nature were received or until it was requested to do so by another body.

List of decisions and recurring/ongoing classification issues

5.7 The Group recalled that at its previous session, it had agreed to keep an internal list of decisions, and a record of recurring or ongoing classification issues that required consideration over several sessions, with the aim of ensuring consistency and facilitating future revisions of Reports and Studies No. 102.

5.8 The Group reviewed and updated the document that had been developed by EHS 59, and agreed it would be circulated to the members of the Group prior to each EHS meeting.

6 CONSOLIDATION OF EXISTING DATA FILES

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

Refinement of column C3 (acute inhalation toxicity) and reassignment of column E1 from "Tainting of sea food" to "Flammability"

6.2 The Group recalled that, from EHS 56 onwards, in accordance with GESAMP Reports and Studies No. 102, it had assigned refined ratings for acute inhalation toxicity by splitting them into C3a (vapour/mist or mist only exposure) and C3b (vapour only exposure) and flammability ratings in column E1 but as of EHS 59, these had not yet been incorporated into the GESAMP Composite List.

6.3 In this regard, the Group was informed by the Secretariat that provisions had been made to incorporate the split C3 ratings and the new E1 ratings in the 2023 Composite List, as set out in annex 4.

6.4 The Group recalled that 24 substances in the GESAMP/EHS Composite List had EHS names marked with a hash mark (#), indicating 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.

6.5 In this context, the Group reviewed the data files for these 24 products and noted that two products had been assigned C3b ratings by recent sessions of the Group. An additional three products were found to have vapour-only acute inhalation toxicity data that allowed C3b

ratings to be assigned, as set out in Table 1:

Table 1: GESAMP/EHS Composite List entries with a hash mark (#) in the name for which a C3b rating could be assigned

EHS No.	EHS name	C3b rating
720	Dodecene (all isomers) (#)	0
2085	Ethyl tert-butyl ether (#)	0
2473	1-Dodecene (#)	0
2516	alpha-Olefins (C12+), mixture (#)	(0)
2517	Alkyl (C3-C11) benzenes with phenol-formaldehyde/acrylate polymers (33% or less) (#)	(0)

6.6 Having reviewed the data files, the Group assigned "NI" to the C3b column for all other products with hash marks.

6.7 Subsequently, the Group agreed that in light of the split C3 column, the hash mark notation was no longer necessary and would be deleted from the EHS names in the 2023 Composite List. The Group also agreed that a list of products which had a hash mark prior to the implemented C3 column split should be recorded, as set out in Table 2:

Table 2: GESAMP/EHS Composite List entries that contained a hash mark (#) in the name prior to this session

EHS No.	EHS name
700	Diphenylmethane-4,4'-diisocyanate
720	Dodecene (all isomers)
764	Ethylene glycol butyl ether acetate
1107	1,5-Pentanedial solution, (5-50%)
1254	Sodium hydroxide solution
2028	Olefins C13 and above, all isomers
2085	Ethyl tert-butyl ether
2456	Triethylenetetramine/2-piperazine-1-ylethylamine mixtures
2459	Naphthalene, crude (molten) (!)
2469	2,6-Diaminohexanoic acid phosphonate mixed salts solution
2473	1-Dodecene
2475	Ethylene glycol (>85%)/Sodium alkyl carboxylates mixture
2476	Long chain alkylphenol (C18-C30)
2477	Ethylene glycol (>75%)/Sodium alkyl carboxylates/borax mixture
2478	Long chain alkylphenol (C14-C18)
2479	Lauroamidopropyl betaine solution
2480	Alkyl (C10-C15, C12 rich) phenol poly(4-12)ethoxylate

EHS No.	EHS name
2481	Polyalkene sulphonic acid (C20-C28), sodium salt
2482	Tallowamidopropylamine Oxide in propylene glycol (70% or less)
2486	Sodium hydroxide (30% or less)/Sodium aluminate (25% or less) solution
2488	Alcohol (C10-C18) poly (7) ethoxylate
2516	alpha-Olefins (C12+), mixture
2517	Alkyl (C3-C11) benzenes with phenol-formaldehyde/acrylate polymers (33% or less)
2518	Sodium oxalate solution

7 COMMUNICATION AND PUBLICATION

7.1 The Group noted that there were no matters to consider under this agenda item.

8 ANY OTHER BUSINESS

Draft provisional agenda and date of the next session

8.1 The Group agreed to the draft provisional agenda for its next session, set out in annex 5, and that its next meeting had been tentatively scheduled to take place from 13 to 17 May 2024, to be held remotely. Subject to the aforementioned dates being confirmed, the deadline for manufacturers to submit information to GESAMP/EHS 61 would be 15 March 2024.

Membership issues

8.2 The Group agreed to reach out to their contacts with a view to recruiting a new toxicologist or ecotoxicologist to the Group.

9 CONSIDERATION AND ADOPTION OF THE REPORT

9.1 The Group adopted its report, noting that it would be circulated as PPR.1/Circ.13.

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ANNEX 1

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

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ANNEX 2

OUTCOMES OF ESPH 28, PPR 10 AND GESAMP 49

1 Outcomes of ESPH 28, PPR 10 and GESAMP 49 that are relevant to GESAMP/EHS 60 are summarized below.

OUTCOMES OF ESPH 28

Evaluation of products and cleaning additives

2 ESPH 28 considered a number of products as part of its routine assessment and assignment of carriage requirements, in accordance with the IBC Code.

Fatty acid methyl esters (m)

3 ESPH 28 considered document ESPH 28/3/11 (United Kingdom), informing the Group of ongoing pollution incidents involving cargoes of "fatty acid methyl ester (m)" (FAME), and proposing reconsideration of its carriage requirements and those of related products, specifically, the inclusion of special requirement 16.2.7 in column o.

4 In the ensuing discussion, there was general agreement that special requirement 16.2.7 should be added to FAME entries to address pollution concerns. One delegation expressed the view that special requirement 16.2.7 applied to persistent floaters with physical properties that included a melting point greater than or equal to 0°C but some FAME products may have a melting point below 0°C.

5 Having noted the general support for adding special requirement 16.2.7 to FAME entries in order to address pollution issue, the Group agreed to invite the United Kingdom and other interested delegations to consider how the envisaged amendment to the carriage requirements could be best implemented while allowing sufficient time for all stakeholders to plan accordingly, and to submit a proposal to the PPR Sub-Committee.

Creosote (coal tar)(amended)

6 Having been informed of the outcomes of GESAMP/EHS 59 regarding the request for re-evaluation of the A1 (bioaccumulation) and B1 (acute aquatic toxicity) ratings for "Creosote (coal tar)", and the subsequent confirmation of the existing ratings for the product by GESAMP/EHS 59, ESPH 28 considered document ESPH 28/3/12 (CEFIC). This document proposed that ESPH 28 either:

.1 assign Ship Type 2 rather than Ship Type 1 due to both the additional environmental impacts of the more stringent requirements for Ship Type 1 (e.g. energy requirements for prewash, empty return trips, and inefficient use of existing tonnage and commercial reasons (i.e. a lack of available Ship Type 1 transatlantic vessels to meet demand); or

.2 agree to ship "Creosote (coal tar)" as a MARPOL Annex I product due to its biological origin in a manner analogous to the decision made at BLG 14 regarding shale oil being treated as a MARPOL Annex I cargo.

7 In the ensuing discussion, ESPH 28 considered three options for "Creosote (coal tar)":

.1 not to deviate from the criteria in chapter 21 of the IBC Code and retain the assignment of ship type 1 to "Creosote (coal tar)" as listed in chapter 17 of the IBC Code, taking into account that the GHP of the product had not been amended by GESAMP/EHS 59;

.2 apply expert judgement in accordance with paragraph 21.1.3 of the IBC Code to assign ship type 2 to "Creosote (coal tar)" taking into account the information in document ESPH 28/3/12; or

.3 agree that "Creosote (coal tar)" should be shipped under the provisions of MARPOL Annex I.

8 Some delegations supported retaining the ship type 1 assignment, as GESAMP/EHS had re-assessed the product and had confirmed the existing ratings, which per chapter 21 triggered a requirement for Ship Type 1. In addition, some delegations expressed concern about potentially setting a precedent of deviating from the outcomes of GESAMP/EHS.

9 In this context, ESPH 28 considered that the combination of A1, B1 and D3 ratings in the GHP for "Creosote (coal tar)" (namely, A1 = (4), B1 = 4 and D3 = CMRSs) triggered the Ship Type 1 requirement per chapter 21 of the IBC Code. However, the major components have an A1 = 4/5 and B1 = 4 rating but no D3 rating and thus would not require ship type 1 to be carried individually.

10 Furthermore, some delegations noted potential negative environmental impacts of assigning ship type 1, as "Creosote (coal tar)" is shipped in heated ship type 2 chemical tankers which are typically dedicated to the trade of other heavy oil (black) products in addition to "Creosote (coal tar)". Consequently, the prewash exemption under regulation 13.4.1 of MARPOL Annex II can be applied to these compatible cargoes. In contrast, because ship type 1 tankers are not currently involved in the trade of heavy oil (black) products, this prewash exemption would not apply. Therefore, if ship type 1 tankers were to carry "Creosote (coal tar)", they would require energy-intensive hot water tank cleanings to achieve cleanliness standards for loading high grade chemicals, which would entail increased fuel use and discharges of wash water and associated cleaning additives.

11 ESPH 28 considered the increased protection of ship type 1 tankers provided by the increased transverse distance that cargo tanks are located inboard and the smaller permitted tank volumes relative to ship type 2. In this context, ESPH 28 noted that the double bottom distances were identical for ship type 1 and ship type 2 and that for both ship types, pollution category X would be assigned. ESPH 28 also noted the view that Administrations would need to consider the redundant tonnage resulting from the shift to ship type 1 tankers for the carriage of "Creosote (coal tar)" which could result in certain Administrations allowing a relaxation of the application of the ship type carriage requirement in accordance with regulation 4.1 of MARPOL Annex II.

12 As an alternative option, some delegations supported the proposal to carry "Creosote (coal tar)" as a MARPOL Annex I cargo and expressed the view that the decision by BLG 14 to classify shale oil as a MARPOL Annex I cargo provided a precedent for a similar classification of "Creosote (coal tar)". Other delegations, however, questioned the appropriateness of both the analogy to shale oil and the potential classification of "Creosote (coal tar)" as a MARPOL Annex I cargo, given the requirement in MEPC.1/Circ.512/Rev.1 that MARPOL Annex I cargoes be of petrochemical origin. In this connection, some delegations expressed the view that coal distillates, including "Creosote (coal tar)", were chemically similar and had similar safety and pollution characteristics as petroleum distillates and that "Creosote (coal tar)" was a complex UVCB mixture.

13 During discussions regarding shipping "Creosote (coal tar)" in accordance with MARPOL Annex I, ESPH 28 noted the view that the IBC Code afforded greater protection for seafarers relative to MARPOL Annex I with regard to certain safety hazards posed by cargoes and that MARPOL Annex I did not have limits on cargo tank volumes (i.e. 3,000 m3 for ship type 2 and 1,250 m3 for ship type 1) as required under the IBC Code. Conversely, ESPH 28 noted that MARPOL Annex I contained more stringent requirements than the IBC Code with regard to the control of operational discharges from the cargo area.

14 Having noted that a revision to MEPC.1/Circ.512/Rev.1 would be necessary for "Creosote (coal tar)" or any other coal distillates to be considered as MARPOL Annex I cargoes, ESPH 28 did not pursue this option further.

15 Focusing on MARPOL Annex II, ESPH 28 proceeded to further consider which ship type to assign to "Creosote (coal tar)". Two delegations emphasized the need to minimize the risk of this product entering the marine environment and expressed reservations with regard to deviating from the established criteria in the IBC Code, which in this case resulted in a ship type 1 assignment.

16 Having considered all of the above views, including that assigning ship type 2 to "Creosote (coal tar)" would avoid the potential negative environmental impacts associated with the need for energy-intensive hot water tank cleanings due to the compatibility of this cargo with heavy oil (black) products (see paragraph 3.57), as well as other considerations (see paragraphs 3.56, 3.58 and 3.60), ESPH 28 was of the view that the assignment of ship type 2 (in combination with pollution category X) would be appropriate in this case. Therefore, ESPH 28 agreed to recommend this way forward, based on expert judgement, to the PPR Sub-Committee for its concurrence.

17 Consequently, ESPH 28 noted that, should the PPR Sub-Committee and subsequently, MEPC, concur with its recommendation:

.1 the expiry date for "Creosote (coal tar) (amended)" would be changed to "none" in the MEPC.2/Circular to be issued on 1 December 2023 and the carriage requirements would be duly incorporated into the entry for "Creosote (coal tar)" in the next revision of chapter 17 of the IBC Code;

.2 a consequential revision to PPR.1/Circ.7 would be required in accordance with paragraph 21.1.3 of the IBC Code; and

.3 the following justification for inclusion in a revision of PPR.1/Circ.7 would be recorded:

> "Taking into account the considerations on safety and environmental protection aspects (see PPR 10/3, paragraphs 3.56 to 3.58 and 3.60), it was agreed that a ship type 2 would be appropriate for carrying this product based on expert judgement."

Classification issues

Estimation of acute dermal toxicity

18 ESPH 28 noted that information on acute dermal toxicity was sometimes lacking in submissions to recent sessions of GESAMP/EHS, due in part to restrictions on animal testing of corrosive substances for ethical reasons. In that regard, the Group also noted that the

dermal toxicity ratings in the absence of dermal toxicity test data had been considered and assigned by direct extrapolation from acute oral toxicity based on Reports and Studies No. 102 (section 4.3.3).

19 ESPH 28 also noted that GESAMP/EHS 59 had agreed that in cases in which corrosive or irritating properties were not reflected in the acute dermal toxicity rating in column C2 according to the GHS and GESAMP Reports and Studies No. 102, a note would be included in the report to flag that the C2 rating does not take into account the potential for irritation or corrosion.

20 With regard to potential future options that GESAMP/EHS could pursue in this context, ESPH 28 noted that options mentioned during GESAMP/EHS 59 session had included:

.1 continuing with the practice of estimating the C2 rating based solely on acute oral toxicity information in the absence of dermal toxicity test data; and for substances where the D1 and/or D2 ratings were greater than zero, noting in the report that the C2 rating was based on oral acute toxicity and did not take into account the potential for irritation or corrosion; or

.2 developing an extrapolation method for acute dermal toxicity in a similar fashion to the GESAMP acute inhalation toxicity extrapolation method; or

.3 assigning "NI" for C2 in the absence of acute dermal toxicity test data and providing advice to the ESPH Technical Group on how the "NI" rating should be interpreted in combination with the C1, D1 and D2 ratings.

21 ESPH 28 further noted that GESAMP/EHS 59 had agreed to consider these matters further at its next and subsequent sessions, and that if any future work on estimation of dermal toxicity significantly altered the current methodology of GESAMP/EHS and/or impacted the ratings of existing entries, it would keep the relevant IMO bodies (i.e., ESPH Technical Group, the PPR Sub-Committee and MEPC) informed and seek their advice, as appropriate.

22 During ESPH 28, the Technical Group had a brief discussion regarding the three options proposed by GESAMP/EHS 59 and expressed a preference for the third option if GESAMP/EHS was able to develop advice for subsequent inclusion in a revision of PPR.1/Circ.7.

OUTCOMES OF PPR 10

23 PPR 10 considered the recommendation of ESPH 28, based on expert judgement, that the assignment of ship type 2 (in combination with Pollution Category X) would be appropriate for "Creosote (coal tar)", and:

.1 concurred with the recommendation;

.2 agreed for the expiry date associated with "Creosote (coal tar) (amended)" to be changed to "none" in the next edition of the MEPC.2 circular (due to be issued on 1 December 2023);

.3 confirmed that the carriage requirements for "Creosote (coal tar) (amended)" would replace the carriage requirements for "Creosote (coal tar)" in the next revision of chapter 17 of the IBC Code; and

.4 noted that the justification prepared by ESPH 28 in this regard, as set out in paragraph 3.64.3 of document PPR 10/3, should be included in a draft consequential revision of the *Decisions with regard to the categorization and classification of products* (PPR.1/Circ.7), and instructed the ESPH Technical Group established by PPR 10 to prepare the draft revision.

REPORT ON GESAMP ACTIVITES

24 The Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) held its 49th session from 5 to 9 September 2022 at IMO headquarters in London, United Kingdom. The session was chaired by Dr. David Vousden.

25 GESAMP was established in 1969 by a number of United Nations' Organizations as a Joint Group to encourage the independent, interdisciplinary consideration of marine pollution and environmental protection issues, with a view to avoiding duplication of efforts within the United Nations system. The main topics considered at this session are described below.

Evaluation of the hazards of harmful substances carried by ships (WG 1)

26 WG 1 met once since GESAMP 48 via a combination of correspondence and virtual plenary sessions due to the COVID-19 restrictions. Data on 10 new substances were evaluated and full GESAMP Hazard Profiles (GHPs) were assigned to all substances. The Group also considered requests for the re-assessment of three substances for which new ratings were assigned.

Review of applications for "active substances" to be used in ballast water management systems (WG 34)

27 WG 34 convened once since GESAMP 48 to evaluate three Ballast Water Management Systems. GESAMP noted the need to provide clarity on the peer-review process of the reports, to safeguard the confidentiality of the reviews and enhance their consistency, and agreed to revise the process in the intersessional period.

Atmospheric input of chemicals to the ocean (WG 38)

28 A publication on the atmospheric transport of microplastics to and from the ocean, resulting from a virtual workshop organized by WG 38 in cooperation with WG 40 titled "Microplastics and nanoplastics in the marine-atmosphere environment" was published by Nature this year. The development of a workshop on the ocean management and policy implications of the air/sea exchange was continuing and would be held later in the year. The WG had also organized a session on the atmospheric input of chemicals to the ocean during the European Geosciences Union meeting in Vienna, Austria in April, and continued its efforts to publish the results of its activities.

Sources, fate and effects of plastics and microplastics in the marine environment (WG 40)

29 GESAMP discussed ways to strengthen the transfer of the science synthesized to policy processes and how the working group can track policy use of its products. GESAMP also reiterated the link between WG 40 and WG 43, and encouraged continued dialogue.

Ocean interventions for climate change mitigation (WG 41)

30 The WG met twice during the intersessional period to discuss the Integrated Assessment Framework, a version of which would be ready by the end of 2022. The WG had provided advice to assist the London Protocol parties in identifying marine geoengineering techniques that they may want to include in Annex 4 of the Protocol. The Working Group continued its representation in international for a, including at the UN Ocean Conference in Lisbon, Portugal.

Impacts of wastes and other matter in the marine environment from mining operations, including marine mineral mining (WG 42)

31 GESAMP noted the progress made regarding the publication of the report which had been split in two volumes. The first volume was near completion while the second volume would require some updating. On finalization of the two volumes of the report, the next stage for the WG 42 would be a decision on how to progress the next section of the Terms of Reference (TOR), and to seek funding for the next phase of the work.

Sea-based sources of marine litter including fishing gear and other shipping related litter (WG 43)

32 GESAMP noted that since GESAMP 48, the Working Group convened a webinar to present the findings of its first report published in October 2021. Since then, the working group had presented the report's findings in several international conferences and meetings. GESAMP approved the new TORs for the next phase of the WG's work, with a first meeting planned for early 2023. GESAMP also tasked the WG 43 Chair with reconfiguring WG member composition to best address the new TORs.

Biofouling management (WG 44)

33 GESAMP noted the group's progress, which had held monthly virtual meetings and was planning to complete its work with the publication of its report at the end of 2023. To facilitate the work within the set timeframes a consultant had been hired by IOC-UNESCO and GloFouling Partnership Project to assist the Chair.

Climate change and greenhouse gas related impacts on contaminants in the ocean (WG 45)

34 Since last year the group had met once virtually. GESAMP noted the group's progress, including the production of a peer-reviewed publication, consolidation of the work of the thematic subgroups and a literature review. In the intersessional period, the group will expand the list of sources of contaminants to the marine environment and refine their classification.

Contribution to other UN processes

35 GESAMP noted the current state of the Regular Process and reiterated its readiness to support the Sponsoring Organizations. It also discussed the possibility for GESAMP's contributions to the Ocean Pavilion of COP 27 and there was agreement to continue discussions on how GESAMP can best contribute to the UNEA negotiation process for the new plastics treaty.

The United Nations Decade of Ocean Science for Sustainable Development

36 GESAMP agreed to continue its efforts to support the Decade and to formalize its contribution through the Decade Advisory Board, encourage Members to register with the Decade Expert Roster and to support the Decade in its strategic ambition setting process. The Chair would outline the proposed way forward in a letter to the Executive Secretary of IOC-UNESCO.

Scoping activities

37 GESAMP considered the progress of its Correspondence Groups that had been developing scoping papers in the intersessional period, including: 1) Sand and gravel mining in the marine environment: new insights on an growing environmental problem; 2) Update the information on sources of the main pollutants impacting the global marine environment (The 80/20 Conundrum); 3) Causes and impacts of massive accumulations of the brown macro-algae Sargassum in the nearshore environment of the Caribbean and West Africa; 4) Relevance of inputs of disinfection by-products (DBPs) into the marine environment; 5) Impact of armed conflicts on the marine environment and sustainable development; and 6) Task Team on Climate Change.

Identification of new and emerging issues

38 GESAMP discussed the following new and emerging issues: 1) marine environmental threats due to the decarbonisation agenda and ways to support the strengthening of evidence base on the issue through a more strategic approach and by communicating the impacts of these changes; and 2) effects of a changing ocean on human health, which led to the formation of a correspondence group developing a scoping paper on the issue.

Strategic review of GESAMP

39 Following consideration of an updated draft plan for a strategic review of GESAMP, it was agreed to establish a Review Task Team, under the lead of the Chair of GESAMP which would provide a first report in March 2023.

GESAMP side-event

40 During the annual session, GESAMP organized a side-event together with IMO as the host of the session, on "Environmental economics and its role in marine environmental protection", with invited speakers from academia, intergovernmental organizations and the financial sector.

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ANNEX 3

GESAMP HAZARD PROFILES FOR NEW SUBSTANCES SUBMITTED FOR EVALUATION TO GESAMP/EHS 60

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

ANNEX 3 - GESAMP HAZARD PROFILES FOR NEW SUBSTANCES SUBMITTED FOR EVALUATION TO GESAMP/EHS 60

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Acrylated ethylene vinyl acetate polymer in ethylhexanol and diethylene glycol	2568 4376	(1)	NI	(1)	NR	2	0	0	0	(2)	NI	(2)	0	2	Ss	2	Fp	3	246856-20-2
Alcohols, C12-14 ethoxylated propoxylated	2566 4276	(0)	NI	(0)	R	3	1	0	(0)	(0)	NI	(0)	(1)	(3)		1	FD	3	68439-51-0
Carboxylated phosphonated sodium allyl sulphonate polymer	2567 4375	0	NI	0	NR	0	0	(0)	(0)	(3)	NI	(3)	(3)	(3)	Ss	2	D	3	1416427-49-0
Dimethyl carbonate	2570 4378	(0)	NI	(0)	R	1	0	0	0	NI	2	2	0	0		4	D	2	616-38-6
Dodecanoic acid, 1-methylethyl ester	2571 4379	5	NI	5	R	0	(0)	0	(0)	(2)	NI	(2)	0	0		1	F	2	10233-13-3
Polyethylene glycol monooleate	2569 4377	(0)	NI	(0)	R	3	0	0	0	(0)	NI	(0)	0	0		1	D	0	9004-96-0
Pongamia/Karanja seed oil, crude	2572 4380	(2)	NI	(2)	R	(2)	(1)	(0)	(0)	(1)	NI	(1)	(1)	(1)		1	Fp	2	247588-54-1

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ANNEX 4

UPDATED GESAMP/EHS 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 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.

3 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.

4 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).

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Acetic acid	13																		
		0	0	0	R	1	NI	1	1	1	NI	1	3C	3		3	D	3	64-19-7
Acetic acid	64																		
Acetic anhydride	12																		
		0	0	0	R	1	NI	1	0	2	NI	2	3	3	A	3	D	3	108-24-7
Acetic anhydride	65																		
Acetochlor (ISO)	2047																		
		3	2	2	NR	4	NI	1	0	(1)	NI	(1)	0	0		1	S	2	34256-82-1
Acetochlor	66																		
Acetone	15																		
		0	0	0	R	0	0	0	0	0	NI	0	1	2		4	DE	2	67-64-1
Acetone	67																		
Acetone cyanohydrin	14																		
		0	0	0	R	4	NI	3	4	3	NI	3	(3)	(3)		2	D	3	75-86-5
Acetone cyanohydrin	68																		
Acetonitrile	16																		
		0	0	0	R	1	NI	1	1	2	NI	2	1	2		4	D	2	75-05-8
Acetonitrile	69																		
Acetonitrile (Low purity grade)	2333																		
		0	NI	0	R	3	NI	1	1	2	NI	2	1	2		4	D	2	
Acetonitrile (Low purity grade)	2876																		
Acid mixtures (nitrating acid)	289																		
		Inorg	NI	0	Inorg	(2)	NI	3	3	4	NI	4	3C	3		0	D	3	
Nitrating acid (mixture of sulphuric and nitric acids)	497																		
Acrylamide	23																		
		0	0	0	R	2	0	2	2	(2)	NI	(2)	1	2	CMNSs	0	D	3	79-06-1
Acrylamide solution (50% or less)	70																		
Acrylamide (ACAM) – Acrylic acid, sodium salt (NaAA) Copolymer (70:30 ACAM:NaAA) in water/iso- and cyclo-alkanes (C12+)	2553																		
		(5)	NI	(5)	(NR)	(2)	(0)	(0)	(0)	(1)	NI	(1)	1	(2)	ASs	1	SD	2	
	4294																		
Acrylamide (ACAM) - Sodium 2-acrylamido-2-methyl-1-propanesulphonic acid (AMPS) Copolymer (68:32 ACAM:AMPS)	2536																		
		0	NI	0	NR	1	0	(0)	(0)	(0)	NI	(0)	(0)	(0)		2	Fp	2	
Acrylamide (ACAM) - Sodium 2-acrylamido-2-methyl-1-propanesulphonic acid (AMPS) Copolymer (68:32 ACAM:AMPS)	4245																		
Acrylamide (ACAM) - Sodium 2-acrylamido-2-methyl-1-propanesulphonic acid (AMPS) Copolymer (70:30 ACAM:AMPS)	2535																		
		0	NI	0	NR	0	0	(0)	(0)	(0)	NI	(0)	(0)	(0)		2	Fp	2	
Acrylamide (ACAM) - Sodium 2-acrylamido-2-methyl-1-propanesulphonic acid (AMPS) Copolymer (70:30 ACAM:AMPS)	4244																		
Acrylamide, polymer with sodium 2-acrylamido-2-methyl-1-propanesulphonic acid (AMPS), tetraethylene glycol diacrylate, and methylene-bisacrylamide	2534																		
		0	NI	0	NR	1	0	0	0	(0)	NI	(0)	0	0		2	Fp	2	
Acrylamide, polymer with sodium 2-acrylamido-2-methyl-1-propanesulphonic acid (AMPS), tetraethylene glycol diacrylate, and methylene-bisacrylamide	4243																		
Acrylated ethylene vinyl acetate polymer in ethylhexanol and diethylene glycol	2568																		
		(1)	NI	(1)	NR	2	0	0	0	(2)	NI	(2)	0	2	Ss	2	Fp	3	246856-20-2
	4376																		
Acrylic acid	24																		
		0	0	0	R	4	NI	2	2	2	NI	2	3C	3		3	D	3	79-10-7
Acrylic acid	71																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Acrylic acid / dimethyldiallylammonium chloride copolymer, partial sodium salt (MWt 1500-4000, aqueous solution)	2406																		
		0	NI	0	R	0	0	0	0	(0)	NI	(0)	0	0		0	D	0	
Acrylic acid / dimethyldiallylammonium chloride copolymer, partial sodium salt (MWt 1500-4000, aqueous solution)	3682																		
Acrylic acid/ethenesulphonic acid copolymer with phosphonate groups, sodium salt (aqueous solution)	2417																		
		0	NI	0	NR	0	NI	0	(0)	(0)	NI	(0)	0	0		0	D	0	
Acrylic acid/ethenesulphonic acid copolymer with phosphonate groups, sodium salt solution	3693																		
Acrylonitrile	25																		
		0	2	2	NR	3	0	2	3	3	NI	3	2	2	CMSs	4	DE	3	107-13-1
Acrylonitrile	72																		
Acrylonitrile-styrene copolymer dispersion in polyether polyol (LOA)	1432																		
		NI	0	0	NI	1	NI	0	(0)	(0)	NI	(0)	0	(0)		1	S	0	
Acrylonitrile-Styrene copolymer dispersion in polyether polyol	73																		
Adiponitrile	26																		
		0	0	0	R	1	NI	3	(3)	3	NI	3	3	(3)		2	FD	3	111-69-3
Adiponitrile	74																		
Alachlor (ISO)	1488																		
		3	3	3	NI	4	1	1	0	(2)	NI	(2)	1	0	CSs	1	S	3	15972-60-8
Alachlor technical (90% or more)	75																		
Alcoholic beverages	293																		
		0	0	0	R	0	0	0	0	0	NI	0	0	1		3	D	1	
Alcoholic beverages, n.o.s.	85																		
Alcoholic silicasol	2198																		
		0	0	0	R	0	0	0	0	0	NI	0	1	2		4	DE	2	
Tetraethyl silicate monomer/oligomer (20% in ethanol)	2475																		
Alcohol(C12-C16) poly(20 and above)ethoxylates	1482																		
		4	(3)	(3)	R	2	0	(0)	(0)	(2)	NI	(2)	2	1		1	D	2	
Alcohol (C12-C16) poly(20+)ethoxylates	78																		
Alcohol(C6-C17)(secondary) poly(3-6)ethoxylate	722																		
		4	3	3	R	4	2	0	(0)	(3)	NI	(3)	3	2		1	D	3	
Alcohol (C6-C17) (secondary) poly(3-6)ethoxylates	81																		
Alcohol(C6-C17)(secondary) poly(7-12)ethoxylate	295																		
		3	3	3	R	4	1	1	0	(3)	NI	(3)	3	3		1	D	3	
Alcohol (C6-C17) (secondary) poly(7-12)ethoxylates	80																		
Alcohol (C10-C18) poly (7) ethoxylate	2488																		
		NI	(3)	(3)	R	3	1	(1)	(0)	(2)	NI	(2)	(2)	(2)		1	D	2	85422-93-1
Alcohol (C10-C18) poly (7) ethoxylate	3979																		
Alcohol (C8-C11) poly(2.5-9)ethoxylates	2094																		
		3	3	3	R	3	NI	1	0	(2)	NI	(2)	(2)	(2)		1	D	2	
Alcohol (C9-C11) poly(2.5-9)ethoxylate	2209																		
Alcohol(C12-C16) poly(1-6) ethoxylates	294																		
		5	3	3	R	4	1	0	0	(2)	NI	(2)	2	2		1	FD	2	
Alcohol (C12-C16) poly(1-6) ethoxylates	77																		
Alcohol(C12-C16) poly(7-19)ethoxylates	1481																		
		4	3	3	R	4	1	1	0	(3)	NI	(3)	3	3		1	D	3	
Alcohol (C12-C16) poly(7-19)ethoxylates	79																		
Alcohol(C12-C14)poly(2)ethoxylate sulphate, sodium salt (*)	2419																		
		2	NI	2	R	3	NI	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI	
	3695																		
Alcohols (C8-C11)	2279																		
		5	2	2	(R)	(3)	(1)	(0)	(0)	(2)	NI	(2)	(2)	(2)		2	Fp	2	
Alcohols (C8-C11), primary, linear and essentially linear	2887																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Alcohols, C13 and above as individuals and mixtures	2039																		
		5	2	2	R	4	1	0	0	0	NI	0	(1)	(1)		2	Fp	2	
Alcohols (C13+)	86																		
Alcohols (C9-11), ethoxylated, phosphate	2547																		
		(0)	NI	(0)	R	3	1	0	0	(2)	NI	(2)	1	2		1	D	2	136504-88-6
	4288																		
Alcohols, C10-C16 ethoxylated propoxylated (*)	2450																		
		0	NI	0	R	3	NI	NI	NI	NI	NI	NI	NI	NI		1	NI	NI	
	3868																		
Alcohols (C12-C13), linear	2294																		
		5	2	2	R	4	(1)	0	0	(1)	NI	(1)	1	1		1	Fp	2	
Alcohols (C12-C13), primary, linear and essentially linear	2950																		
Alcohols, C12-14 ethoxylated propoxylated	2566																		
		(0)	NI	(0)	R	3	1	0	(0)	(0)	NI	(0)	(1)	(3)		1	FD	3	68439-51-0
	4276																		
Alcohols (C14-C18), linear	2293																		
		5	2	2	R	0	1	0	0	(1)	NI	(1)	1	1		1	Fp	2	
Alcohols (C14-C18), primary, linear and essentially linear	2951																		
Alcohols, linear (C10-C14)	2365																		
		(5)	(2)	(2)	(R)	(4)	(1)	0	0	(2)	NI	(2)	(2)	(2)		4	Fp	2	
Decyl/Dodecyl/Tetradecyl alcohol mixture	3128																		
Alkanes (C6-C9)	2202																		
		(5)	NI	(5)	(R)	(4)	NI	(0)	(0)	(1)	NI	(1)	(2)	(2)	N	4	FE	2	
Alkanes (C6-C9)	88																		
Iso- and cyclo-alkanes (C10-C11)	2203																		
		(5)	NI	(5)	NI	(0)	(0)	(0)	(0)	(1)	NI	(1)	(1)	(0)		3	F	1	
Iso- and cyclo-alkanes (C10-C11)	393																		
Iso-and cyclo-alkanes (C12+)	2204																		
		(5)	NI	(5)	NI	(0)	NI	0	0	(1)	NI	(1)	(0)	(0)	A	3	NI	2	
Iso- and cyclo-alkanes (C12+)	394																		
Alkanes (C5-C7), linear and branched	2464																		
		(5)	NI	(5)	(R)	(3)	(0)	0	0	0	NI	0	2	0	NA	4	E	2	
Alkanes (C5-C7), linear and branched	3799																		
Alkanes (C10-C17), linear and branched	2463																		
		(5)	NI	(5)	R	0	1	0	0	(0)	NI	(0)	0	0	A	3	F	3	
Alkanes (C10-C17), linear and branched	3815																		
Alkanes (C10-C26), linear and branched	2392																		
		0	NI	0	R	0	NI	0	0	(1)	NI	(1)	1	1	A	3	F	3	90622-53-0
Alkanes (C10-C26), linear and branched (flashpoint >60°C)	3562																		
Alkanes (C10-C26), linear and branched	2392																		
		0	NI	0	R	0	NI	0	0	(1)	NI	(1)	1	1	A	3	F	3	90622-53-0
Alkanes (C10-C26), linear and branched (flashpoint ≤60°C)	3736																		
Alkanes (C4-C12) linear, branched and cyclic (containing benzene up to 1%)	2510																		
		(4)	(4)	(4)	R	(3)	(2)	0	0	0	NI	0	2	(1)	CMA	4	F	3	
Alkanes (C4-C12) linear, branched and cyclic	3999																		
Alkanes (C9-C24) linear, branched and cyclic	2511																		
		(5)	(4)	(4)	NR	(2)	(1)	0	(0)	0	NI	0	(2)	0	A	3	F	3	
Alkanes (C9-C24) linear, branched and cyclic (flashpoint >60°C)	3998																		
Alkanes (C9-C24) linear, branched and cyclic	2511																		
		(5)	(4)	(4)	NR	(2)	(1)	0	(0)	0	NI	0	(2)	0	A	3	F	3	
Alkanes (C9-C24) linear, branched and cyclic (flashpoint ≤60°C)	4250																		
n-Alkanes (C9-C11)	2449																		
		(5)	NI	(5)	R	0	(0)	0	0	(0)	NI	(0)	1	0	A	3	F	3	
n-Alkanes (C9-C11)	3884																		
n-Alkanes (C10-C20)	296																		
		(5)	(5)	(5)	(R)	(0)	NI	(0)	(0)	(0)	NI	(0)	(1)	(1)	A	3	Fp	3	
n-Alkanes (C10-C20)	471																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Alkane (C14-C17) sulphonic acid, sodium salt (60-65% solution)	334																		
		2	2	2	R	3	1	0	0	(2)	NI	(2)	2	2		1	D	2	
Sodium alkyl (C14-C17) sulphonates (60-65% solution)	1153																		
Alkaryl polyether (C9-C20) (LOA)	1974																		
		4	NI	4	NR	3	NI	0	0	(3)	NI	(3)	2	3		1	S	2	
Alkaryl polyethers (C9-C20)	90																		
Alkenoic acid ester, borated	2376																		
		5	(3)	(3)	R	2	NI	0	0	(2)	NI	(2)	2	0		1	Fp	2	
	3153																		
Alkenylamide, long chain, more than C10	1858																		
		3	NI	3	(NR)	4	NI	0	(0)	(1)	NI	(1)	0	1		1	Fp	2	
Alkenyl (C11+) amide	838																		
Alkenyl succinic anhydride	298																		
		0	0	0	NR	1	NI	0	0	(2)	NI	(2)	2	(2)	SsSr	1	FD	2	
Alkenyl (C16-C20) succinic anhydride	2336																		
Alkyl acrylate/Vinyl pyridine copolymer in toluene	299																		
		2	2	2	R	2	0	0	0	(2)	NI	(2)	2	2	RNA	4	F/Fp	3	
Alkyl acrylate/vinylpyridine copolymer in toluene	94																		
Alkyl/cyclo(C4-C5)alcohols	2447																		
		(1)	(1)	(1)	(R)	(2)	(0)	(1)	(1)	(2)	NI	(2)	(2)	(3)		1	FED	3	
Alkyl/cyclo (C4-C5) alcohols	3962																		
Alkyl/cyclo(C4-C5)alcohols	2447																		
		(1)	(1)	(1)	(R)	(2)	(0)	(1)	(1)	(2)	NI	(2)	(2)	(3)		1	FED	3	
	3825																		
Alkyl amine, alkenyl acid ester, mixture	1433																		
		NI	NI	NI	NI	1	NI	(0)	(0)	NI	NI	NI	NI	NI		1	Fp	2	
Alkyl(C8+)amine, Alkenyl (C12+) acid ester mixture	98																		
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)	NI	(1)	1	0		1	S	1	
Alkylaryl phosphate mixtures (more than 40% Diphenyl tolyl phosphate, less than 0.02% ortho-isomers)	280																		
Alkylated phenols (C4-C9)	2273																		
		0	2	0	NR	1	0	1	0	(2)	NI	(2)	1	1		1	Fp	2	
Alkylated (C4-C9) hindered phenols	2575																		
Alkylbenzene distillation bottoms	300																		
		0	2	2	NR	0	(3)	0	0	1	NI	1	1	1		1	Fp	2	
Alkylbenzene distillation bottoms	3106																		
Alkyl (C12-C15) benzene/indane/indene mixture	1872																		
		0	4	4	NR	0	NI	0	0	0	NI	0	0	2		1	FE	2	
Alkylbenzene, alkylindane, alkylindene mixture (each C12-C17)	103																		
Alkylbenzene mixtures (containing at least 50% of toluene)	2303																		
		(2)	(2)	(2)	(R)	(3)	(0)	0	0	(2)	NI	(2)	2	2	ACMNR	4	FE	3	
Alkylbenzene mixtures (containing at least 50% of toluene)	2909																		
Alkyl (C3-C4) benzenes	2206																		
		(3)	NI	(3)	R	4	NI	0	0	(2)	NI	(2)	(2)	(1)		3	FE	2	
Alkyl (C3-C4) benzenes	91																		
Alkyl (C5-C8) benzenes	2207																		
		5	4	4	(NR)	4	NI	0	0	(2)	NI	(2)	(2)	(1)		2	F	2	
Alkyl (C5-C8) benzenes	92																		
Alkyl benzenes, C9-C17 (straight or branched)	1783																		
		0	4	4	NR	1	NI	0	(0)	(1)	NI	(1)	(1)	(1)		1	F	1	
Alkyl(C9+)benzenes	100																		
Alkylbenzenes mixture (containing less than 1% naphthalene)	2423																		
		3	3	3	NR	4	NI	0	0	(2)	NI	(2)	2	1	A	2	F	3	
Alkylbenzenes mixture (containing less than 1% naphthalene)	3600																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Alkylbenzenes mixtures (containing naphthalene)	2424																		
		(3)	(3)	(3)	(NR)	(4)	NI	0	0	(1)	NI	(1)	1	1	A	2	F	3	
Alkylbenzenes mixtures (containing naphthalene)	3966																		
Alkyl(C11-C13)benzenesulphonates, straight chain	301																		
		3	3	3	R	3	1	1	(1)	(3)	NI	(3)	2	3		1	FD	3	42615-29-2
Alkylbenzene sulphonic acid, sodium salt solution	102																		
Alkyl (C3-C11) benzenes with phenol-formaldehyde/acrylate polymers (33% or less)	2517																		
		4	NI	4	NR	2	0	0	0	(2)	(0)	(0)	(2)	(2)	MASs	3	F	3	
Alkyl (C3-C11) benzenes with phenol-formaldehyde/acrylate polymers (33% or less)	4198																		
Alkyl(branched C10-C18, C12 rich)phenols	2504																		
		0	4	4	NR	5	3	0	0	(3)	NI	(3)	3	3	R	1	Fp	3	
Alkylphenols (C10-C18, C12 rich)	4070																		
Alkyl dithiocarbamate (C19-C35)	2236																		
		0	NI	0	NI	1	NI	0	0	(0)	NI	(0)	0	0		1	S	0	
Alkyl dithiocarbamate (C19-C35)	2538																		
Alkyl dithio thiadiazole (C6-C24) (LOA)	1981																		
		5	NI	5	NR	1	NI	0	0	(0)	NI	(0)	0	0		1	S	2	
Alkyl dithiothiadiazole (C6-C24)	104																		
Alkyl(C4-C20) ester copolymer (LOA)	1986																		
		NI	0	0	NR	0	NI	0	0	(0)	NI	(0)	0	0		2	Fp	2	
Alkyl ester copolymer (C4-C20)	2202																		
Alkylnaphthalenes, crude (containing less than 1% naphthalene)	2425																		
		4	4	4	R	4	NI	0	0	(1)	NI	(1)	1	1	AC	1	F	3	
Alkylnaphthalenes (containing less than 1% naphthalene), crude	3601																		
Alkylnaphthalenes, crude (containing naphthalene)	2426																		
		(4)	(4)	(4)	(R)	(4)	NI	0	0	(1)	NI	(1)	1	1	AC	0	F	3	
Alkylnaphthalenes (containing naphthalenes), crude	3699																		
Alkyl (C7-C9) nitrates	8																		
		4	NI	4	NR	3	NI	0	0	(3)	NI	(3)	2	(3)		2	F	3	
Alkyl (C7-C9) nitrates	93																		
Alkyl(C8-C40)phenol sulphide (LOA)	1985																		
		0	NI	0	NR	0	NI	0	0	(1)	NI	(1)	1	1		1	FD	1	
Alkyl (C8-C40) phenol sulphide	2253																		
Alkyl(C8-C9)phenylamine, in aromatic solvent (LOA)	2096																		
		2	NI	2	NR	3	NI	(0)	(0)	(2)	NI	(2)	2	2		3	S	2	
Alkyl (C8-C9) phenylamine in aromatic solvents	2200																		
Alkyl (C9-C15) phenyl propoxylate	2188																		
		0	NI	0	NR	0	NI	0	0	(2)	NI	(2)	2	2		1	FD	2	
Alkyl (C9-C15) phenyl propoxylate	2430																		
Alkyl[(C8-C10)/(C12-C14)]:(<40%/>60%)polyglucoside mixture solution (max 55% active material)	2134																		
		3	NI	3	R	3	0	0	0	(3)	NI	(3)	2	3		1	D	3	141464-42-8
Alkyl (C8-C10)/(C12-C14):(40% or less/60% or more) polyglucoside solution (55% or less)	2248																		
Alkyl[(C8-C10)/(C12-C14)]:(>60%/<40%)polyglucoside mixture solution (max 55% active material)	2135																		
		3	NI	3	R	2	0	0	0	(2)	NI	(2)	2	2		1	D	2	141464-42-8
Alkyl (C8-C10)/(C12-C14):(60% or more/40% or less) polyglucoside solution(55% or less)	2246																		
Alkyl(C8-C10)polyglucoside solution (max 65% active material)	2136																		
		1	NI	1	R	2	0	0	0	(2)	NI	(2)	2	2		1	D	2	68515-73-1
Alkyl (C8-C10) polyglucoside solution (65% or less)	2245																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Alkyl (C8-C10)/(C12-C14):(50%/50%) polyglucoside solution (55% or less)	2133																		
		3	NI	3	R	2	0	0	0	(3)	NI	(3)	2	(3)		1	D	3	
Alkyl (C8-C10)/(C12-C14):(50%/50%) polyglucoside solution (55% or less)	2247																		
Alkyl(C12-C14)polyglucoside solution (max 55% active material)	2137																		
		3	NI	3	R	3	0	0	0	(3)	NI	(3)	2	3		1	D	3	110615-47-9
Alkyl (C12-C14) polyglucoside solution (55% or less)	2249																		
Alkyl (C10-C15, C12 rich) phenol poly(4-12)ethoxylate	2480																		
		(5)	(4)	(4)	(NR)	(2)	NI	(0)	(0)	(2)	NI	(2)	(2)	(1)		1	SD	2	
Alkyl (C10-C15, C12 rich) phenol poly(4-12)ethoxylate	3953																		
Alkylsulphonic acid ester of phenol (MESAMOLL)	1878																		
		5	NI	5	NR	0	NI	0	(0)	(0)	NI	(0)	0	0		1	S	0	91082-17-6
Alkyl sulphonic acid ester of phenol	1701																		
Alkyltoluenes	2374																		
		0	2	2	NR	0	NI	0	(0)	(1)	NI	(1)	0	1		1	Fp	2	
Alkyl (C18+) toluenes	3148																		
Alkyl(C18-C28)toluenesulphonic acid (>90% in mineral oil)	2429																		
		0	4	4	NR	3	NI	0	0	(3)	NI	(3)	2	3	Ss	1	Fp	3	
Alkyl(C18-C28)toluenesulphonic acid	3658																		
Alkyl(C18-C28)toluenesulphonic acid, calcium salts, borated (up to 70% in mineral oil)	2404																		
		0	4	4	NR	0	NI	(0)	(0)	(1)	NI	(1)	(1)	(1)	Ss	1	S	2	
Alkyl(C18-C28)toluenesulphonic acid, calcium salts, borated	3661																		
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)	NI	(0)	0	0	Ss	1	S	2	
Alkyl (C18-C28) toluenesulphonic acid, calcium salts, high overbase	3149																		
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)	NI	(2)	2	0	Ss	1	Fp	3	
Alkyl (C18-C28) toluenesulphonic acid, calcium salts, low overbase	3685																		
Allyl alcohol	28																		
		0	0	0	R	4	NI	2	3	3	NI	3	2	3	A	4	D	3	107-18-6
Allyl alcohol	105																		
Aluminium chloride/hydrogen chloride solution	336																		
		Inorg	NI	2	Inorg	3	1	1	(0)	3	NI	3	(3C)	3		0	D	3	
Aluminium chloride (30% or less)/Hydrochloric acid (20% or less) solution	110																		
Aluminium hydroxide, sodium hydroxide, sodium carbonate solution (40% or less)	2438																		
		Inorg	0	0	Inorg	3	NI	0	0	(3)	NI	(3)	3B	(3)		0	D	3	
Aluminium hydroxide, sodium hydroxide, sodium carbonate solution (40% or less)	3807																		
Aluminium sulphate solution	2205																		
		Inorg	Inorg	2	Inorg	3	1	1	(0)	(3)	NI	(3)	(2)	(3)		0	D	3	
Aluminium sulphate solution	111																		
Amides, coco, N-[3-(dibutylamino) propyl], acrylates	2513																		
		(4)	NI	(4)	NR	4	NI	0	0	(2)	NI	(2)	2	2		1	Fp	2	851545-09-0
	4162																		
2-(2-Aminoethoxy) ethanol	75																		
		0	0	0	NR	1	0	0	1	(3)	NI	(3)	3	3		1	D	3	929-06-6
2-(2-Aminoethoxy) ethanol	37																		
Aminoethylethanolamine	68																		
		0	0	0	NR	1	0	0	0	(3)	NI	(3)	3B	2	SsSr	1	D	3	111-41-1
Aminoethyl ethanolamine	112																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Aminoethylethanolamine/Aminoethyldiethanolamine solution	74																		
		Inorg	0	0	NR	1	0	(0)	(0)	(3)	NI	(3)	(3B)	(2)	SsSr	1	D	3	
Aminoethyldiethanolamine/Aminoethylethanolamine solution	113																		
N-Aminoethylpiperazine	88																		
		0	0	0	NR	1	NI	0	2	(3)	NI	(3)	3	3	Ss	2	D	3	140-31-8
N-Aminoethylpiperazine	472																		
2-Amino-2-(hydroxymethyl)-1,3-propanediol solution(40% or less)	89																		
		0	NI	0	NI	1	NI	0	0	NI	NI	NI	NI	NI		0	D	NI	77-86-1
2-Amino-2-hydroxymethyl-1,3-propanediol solution (40% or less)	38																		
2-Amino-2-methyl-1-propanol	90																		
		0	0	0	NR	1	NI	0	0	(3)	NI	(3)	3	3		2	DE	3	124-68-5
2-Amino-2-methyl-1-propanol	39																		
Ammonia (anhydrous and aqueous, 28% or less)	91																		
		0	0	0	R	3	2	1	(2)	3	NI	3	3	3		0	DE	3	7664-41-7
Ammonia aqueous (28% or less)	114																		
Ammonium bisulphite solution, greater than 15%	1730																		
		NI	NI	NI	NI	1	NI	NI	NI	NI	NI	NI	2	2		0	D	2	10192-30-0
Ammonium bisulphite solution (70% or less)	115																		
Ammonium chloride solution (less than 25%)	2388																		
		0	NI	0	Inorg	1	0	0	(0)	(2)	NI	(2)	2	2		0	D	2	12125-02-9
Ammonium chloride solution (less than 25%) (*)	3411																		
Ammonium lignosulphonate (46% solution in water)	2086																		
		0	NI	0	NR	0	NI	0	(0)	(0)	NI	(0)	0	0		0	D	0	8061-53-0
Ammonium lignosulphonate solutions	118																		
Ammonium nitrate solutions	1912																		
		Inorg	0	0	Inorg	1	NI	0	0	(2)	NI	(2)	1	2		0	D	2	
Ammonium nitrate solution (93% or less) (*)	119																		
Ammonium polyphosphate solution	1764																		
		Inorg	0	0	Inorg	1	NI	0	0	0	NI	0	1	0		0	D	1	10-34-0
Ammonium polyphosphate solution	120																		
Ammonium sulphate	99																		
		0	0	0	Inorg	1	(0)	0	(0)	(0)	NI	(0)	0	0		0	D	0	7783-20-2
Ammonium sulphate solution	121																		
Ammonium sulphide soln.(45% or less)	310																		
		Inorg	0	0	Inorg	3	NI	1	0	(2)	NI	(2)	2	2	N	4	D	2	12124-99-1
Ammonium sulphide solution (45% or less) (*)	122																		
Ammonium thiocyanate/ Ammonium thiosulphate solution	1732																		
		Inorg	0	0	Inorg	1	NI	1	NI	NI	NI	NI	NI	NI		0	D	NI	
Ammonium thiocyanate (25% or less)/Ammonium thiosulphate (20% or less) solution	123																		
Ammonium thiosulphate solution (60% or less)	312																		
		Inorg	0	0	Inorg	1	NI	0	(0)	(1)	NI	(1)	(1)	(1)		0	D	1	7783-18-8
Ammonium thiosulphate solution (60% or less)	124																		
Amyl acetate	255																		
		2	2	2	NR	2	NI	0	(0)	0	NI	0	1	1		4	FED	2	628-63-7
Amyl acetate (all isomers)	125																		
tert-Amyl ethyl ether	2428																		
		3	NI	3	NR	1	NI	0	(0)	0	NI	0	2	2		4	E	2	
tert-Amyl ethyl ether	3623																		
tert-Amyl methyl ether	2141																		
		1	NI	1	NI	4	NI	1	0	2	NI	2	0	1		4	ED	2	
tert-Amyl methyl ether	2210																		
Amyl propionate	1484																		
		2	NI	2	R	2	NI	0	0	(2)	NI	(2)	2	1		3	F	2	624-54-4
n-Pentyl propionate	484																		
Aniline	261																		
		0	0	0	R	3	2	2	2	3	NI	3	1	3	CTSs	2	FD	3	62-53-3
Aniline	127																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Apple juice	275																		
		0	NI	0	R	0	0	0	0	0	NI	0	0	0		0	D	0	
Apple juice	130																		
Aryl polyolefin (C11-C50) (LOA)	1979																		
		NI	NI	0	NR	0	NI	0	0	0	NI	0	0	0		1	Fp	2	
Aryl polyolefins (C11-C50)	131																		
L-Aspartic acid, homopolymer, sodium salt (aqueous solution)	2421																		
		0	0	0	NR	0	NI	0	(0)	0	NI	0	0	0		0	D	0	
L-Aspartic acid, homopolymer, sodium salt (aqueous solution)	3697																		
Aviation alkylates (C8 paraffins and iso-paraffins BPt 95-120 Celcius)	286																		
		(5)	NI	(5)	(R)	(4)	NI	0	0	(0)	NI	(0)	(0)	(0)		4	FE	2	
Aviation alkylates (C8 paraffins and iso-paraffins BPT 95 - 120°C)	132																		
Aziridine polymer with methyloxirane (78% in diethylene glycol monoethyl ether)	2436																		
		0	NI	0	NR	2	0	0	0	0	NI	0	1	0		2	Fp	2	
Aziridine polymer with methyloxirane (78% in diethylene glycol monoethyl ether)	3751																		
Barium long chain alkaryl sulphonate (C11-C50) (LOA)	1978																		
		4	NI	4	NR	3	NI	2	0	(2)	NI	(2)	0	0		1	S	2	
Barium long chain (C11-C50) alkaryl sulphonate	2370																		
Benzaldehyde	2498																		
		1	NI	1	R	3	NI	1	(1)	2	NI	2	2	2		2	FD	2	100-52-7
Benzaldehyde	4132																		
Benzene	324																		
		2	1	1	R	2	NI	1	0	0	NI	0	2	2	CTM	4	E	3	71-43-2
Benzene and mixtures having 10% benzene or more (i)	133																		
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)	NI	(0)	0	0		1	Fp	2	
Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl), 4-hydroxy-C7-C9 alcohols branched and linear	3405																		
Benzene sulphonyl chloride	320																		
		1	1	1	R	3	NI	1	(2)	(3)	NI	(3)	3	3	Ss	1	SD	3	98-09-9
Benzene sulphonyl chloride	134																		
1,2,4-Benzene tricarboxylic acid, trioctyl ester	1733																		
		0	0	0	NR	0	NI	0	(0)	2	NI	2	1	1		1	Fp	2	
Benzenetricarboxylic acid, trioctyl ester	136																		
Benzyl acetate	348																		
		1	NI	1	R	3	1	1	0	2	NI	2	1	1		1	SD	2	140-11-4
Benzyl acetate	138																		
Benzyl alcohol	349																		
		1	NI	1	R	2	NI	1	1	2	NI	2	2	2		1	SD	2	100-51-6
Benzyl alcohol	139																		
Benzyl chloride	352																		
		NI	1	1	R	3	1	1	(2)	3	NI	3	3	3	CSsA	3	S	3	100-44-7
Benzyl chloride	140																		
Bis(2-ethylhexyl) terephthalate	2437																		
		0	3	3	R	0	0	0	0	(1)	NI	(1)	1	1		1	Fp	2	
Bis(2-ethylhexyl) terephthalate	3752																		
N,N-Bis(2-hydroxyethyl)oleamide (LOA)	2110																		
		5	NI	5	NR	NI	NI	0	0	(2)	NI	(2)	2	2		4	Fp	2	
N,N-bis(2-hydroxyethyl) oleamide	2201																		
Bismuth oxide	2483																		
		Inorg	(0)	(0)	Inorg	(0)	(0)	0	(0)	0	NI	0	0	0		0	S	0	1304-76-3
Bismuth oxide	4059																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Bis[3-(triethoxysilyl)propyl]amine	2444																		
		1	NI	1	R	1	NI	0	0	(2)	NI	(2)	2	2		1	D	2	13497-18-2
	3823																		
Borax, anhydrous or hydrated, crude or refined	359																		
		Inorg	0	0	Inorg	1	0	0	0	(1)	NI	(1)	1	1	R	0	S	3	1303-96-4
Borax	143																		
Boric acid	360																		
		Inorg	0	0	Inorg	1	0	0	(0)	(1)	NI	(1)	1	1	R	0	S	3	10043-35-3
Boric acid	2254																		
Brassica carinata oil containing less than 3% free fatty acids	2562																		
		(0)	NI	(0)	(R)	(2)	NI	(0)	(0)	(0)	NI	(0)	(1)	(1)		1	Fp	2	
Brassica carinata oil	4320																		
Bromochloromethane	2084																		
		1	1	1	NR	1	NI	0	0	0	NI	0	1	0		0	SD	1	74-97-5
Bromochloromethane	145																		
1-Bromopropane	2229																		
		2	NI	2	NI	NI	NI	0	(0)	0	NI	0	(2)	(2)		2	SD	2	
1-Bromopropane	2696																		
Butanol	381																		
		0	(0)	0	R	0	NI	0	0	0	NI	0	2	3		3	D	3	71-36-3
n-Butyl alcohol	474																		
Butanol	381																		
		0	(0)	0	R	0	NI	0	0	0	NI	0	2	3		3	D	3	71-36-3
Butyl alcohol (all isomers)	2216																		
sec-Butanol	383																		
		0	(0)	0	R	0	NI	0	0	0	NI	0	0	2		3	D	2	78-92-2
sec-Butyl alcohol	638																		
tert-Butanol	384																		
		0	0	0	NR	1	NI	0	0	0	NI	0	1	3		4	D	3	75-65-0
tert-Butyl alcohol	686																		
2-Butanone	385																		
		0	NI	0	R	1	0	0	0	1	NI	1	2	2		4	DE	2	78-93-3
Methyl ethyl ketone	446																		
Butene oligomer	386																		
		0	NI	0	NR	(4)	0	0	0	0	NI	0	0	1		4	FE	2	
Butene oligomer	146																		
2-Butoxyethanol/hyperbranched polyesteramide mixture	2446																		
		NI	NI	(0)	NR	(2)	NI	1	2	2	NI	2	1	2		2	D	2	
2-Butoxyethanol (58%)/Hyperbranched polyesteramide (42%) (mixture)	3901																		
Butyl acetate	387																		
		1	NI	1	R	2	NI	0	0	0	NI	0	0	1		4	FED	2	123-86-4
Butyl acetate (all isomers)	147																		
Butyl acrylate	390																		
		2	NI	2	R	3	NI	1	1	1	NI	1	2	2	SsA	4	FED	2	141-32-2
Butyl acrylate (all isomers)	148																		
Butylamine	392																		
		0	NI	0	R	2	NI	2	2	3	NI	3	3C	3		4	DE	3	109-73-9
Butylamine (all isomers)	154																		
Butyl benzene	1774																		
		4	NI	4	NI	4	1	0	0	(2)	NI	(2)	2	1		3	Fp	2	104-51-8
Butylbenzene (all isomers)	155																		
Butyl benzyl phthalate	398																		
		4	4	4	R	4	2	0	0	(0)	NI	(0)	(0)	(0)	R	1	S	3	85-68-7
Butyl benzyl phthalate	149																		
Butyl butyrate	399																		
		2	NI	2	(R)	2	NI	0	0	(1)	NI	(1)	1	NI		3	FE	2	109-21-7
Butyl butyrate (all isomers)	150																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Butyl/Decyl/Cetyl/Eicosyl methacrylate mixture	2295																		
		(5)	NI	(5)	(R)	(3)	NI	0	0	0	NI	0	2	2	Ss	3	FE	2	
Butyl/Decyl/Cetyl/Eicosyl methacrylate mixture	153																		
Butylene glycol(s)	402																		
		0	NI	0	R	1	NI	1	0	0	NI	0	0	0		2	D	1	110-63-4
Butylene glycol	156																		
Butylene glycol methyl ether acetate	953																		
		1	1	1	R	3	NI	0	(0)	(1)	NI	(1)	1	1		2	FED	1	4435-53-4
3-Methoxybutyl acetate	58																		
Butylene glycol monomethyl ether	952																		
		0	NI	0	R	1	NI	0	0	(1)	NI	(1)	0	1		3	D	1	2517-43-3
3-Methoxy-1-butanol	57																		
1,2-Butylene oxide	403																		
		0	NI	0	NR	2	NI	1	1	2	NI	2	2	2	C	4	DE	3	106-88-7
1,2-Butylene oxide	8																		
Butyl methacrylate	409																		
		2	NI	2	NR	1	NI	0	0	0	NI	0	2	2	Ss	3	FE	2	97-88-1
Butyl methacrylate	151																		
Butyl octyl phthalate	410																		
		5	NI	5	(R)	0	2	0	(0)	(1)	NI	(1)	(1)	(1)		NI	Fp	2	84-78-6
Butyl octyl phthalate	2749																		
Butyl phosphate/dibutyl phosphate mixture	2434																		
		2	NI	2	R	1	0	0	(0)	(3)	NI	(3)	2	3		2	D	3	
Butyl phosphate/dibutyl phosphate mixture	3749																		
Butyl propionate	1483																		
		2	NI	2	R	2	NI	0	0	0	NI	0	1	1		3	FED	2	590-01-2
n-Butyl propionate	476																		
1-Butylpyrrolidin-2-one	2490																		
		1	(1)	1	R	1	0	1	0	0	NI	0	1	2		1	D	2	3470-98-2
	4124																		
Butyl stearate	413																		
		0	NI	0	(R)	0	NI	0	NI	NI	NI	NI	2	NI		1	Fp	2	123-95-5
Butyl stearate	152																		
Butyraldehyde	416																		
		1	NI	1	R	2	0	0	1	0	NI	0	3	3		4	DE	3	123-72-8
Butyraldehyde (all isomers)	157																		
Butyric acid	418																		
		0	NI	0	R	2	0	0	0	0	NI	0	3A	3		2	D	3	107-92-6
Butyric acid	158																		
Butyrolactone	420																		
		0	NI	0	R	(3)	NI	1	(0)	0	NI	0	0	1	C	1	D	3	96-48-0
gamma-Butyrolactone	360																		
Calcium alkyl (long chain) salicylate (overbased) in mineral oil (LOA)	70																		
		0	NI	0	NR	2	NI	0	0	(1)	NI	(1)	(1)	(1)	Ss	1	Fp	3	
Calcium long-chain alkyl salicylate (C13+)	166																		
Calcium alkyl phenol sulphide,polyolefin phosphorosulphide mixture (LOA)	1435																		
		NI	NI	NI	NR	4	NI	0	0	(0)	NI	(0)	NI	NI		1	NI	NI	
Calcium alkyl (C9) phenol sulphide/Polyolefin phosphorosulphide mixture	160																		
Calcium alkyl salicylate	2015																		
		3	NI	3	NR	2	NI	0	0	(2)	NI	(2)	2	2		1	Fp	2	
Calcium alkyl (C10-C28) salicylate	3152																		
Calcium bromide (solutions)	427																		
		Inorg	NI	0	Inorg	0	0	(0)	(0)	(2)	NI	(2)	(1)	(2)		0	D	2	7789-41-5
Drilling brines (containing calcium bromide)	308																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Calcium carbonate slurry	2016																		
		Inorg	0	0	Inorg	0	NI	0	(0)	(0)	NI	(0)	0	0		0	S	0	471-34-1
Calcium carbonate slurry	161																		
Calcium chloride solution	2519																		
		Inorg	0	0	Inorg	0	0	1	0	(1)	NI	(1)	1	1		0	D	0	10043-52-4
Calcium chloride solution (less than 35%) (*)	4227																		
Calcium hydroxide	431																		
		Inorg	0	0	Inorg	2	NI	0	(0)	(2)	NI	(2)	1	2		0	S	2	1305-62-0
Calcium hydroxide slurry	162																		
Calcium hypochlorite solutions containing 15% Ca(OCl)2 or more	432																		
		Inorg	0	0	Inorg	5	NI	1	0	2	NI	2	3A	3		0	D	3	7778-54-3
Calcium hypochlorite solution (more than 15%)	164																		
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	NI	2	3A	3		0	D	3	7778-54-3
Calcium hypochlorite solution (15% or less)	163																		
Calcium lignosulphonate (52% solution in water)	2087																		
		0	NI	0	NR	0	NI	0	(0)	(0)	NI	(0)	0	0		0	D	0	8061-52-7
Calcium lignosulphonate solutions	165																		
Calcium long chain alkaryl sulphonate (C11-C50) (LOA)	1973																		
		NI	0	0	NR	0	NI	0	0	(1)	NI	(1)	1	1		1	FD	1	
Calcium alkaryl sulphonate (C11-C50)	169																		
Calcium long chain alkyl (C5-C10) phenate (LOA)	2106																		
		0	NI	0	NR	2	NI	0	0	(0)	NI	(0)	0	0		1	FD	1	
Calcium long-chain alkyl (C5-C10) phenate	168																		
Calcium long chain alkyl (C11-C40) phenate (LOA)	2097																		
		0	NI	0	NR	0	NI	0	0	(1)	NI	(1)	1	1		1	Fp	2	
Calcium long-chain alkyl (C11-C40) phenate	167																		
Calcium long chain alkyl phenate sulphide (C8-C40) (LOA)	1756																		
		0	NI	0	NR	1	NI	0	0	(1)	NI	(1)	1	1		1	Fp	2	
Calcium long-chain alkyl phenate sulphide (C8-C40)	170																		
Calcium long-chain alkyl phenolic amine (C8-C40)	1728																		
		NI	NI	NI	NR	0	NI	0	0	(1)	NI	(1)	1	(1)		1	Fp	2	
	171																		
Calcium long-chain alkyl (C18-C28) salicylate	2383																		
		0	NI	0	NR	0	NI	0	0	(1)	NI	(1)	1	0	Ss	1	Fp	3	
Calcium long-chain alkyl (C18-C28) salicylate	3426																		
Calcium nitrate	1803																		
		Inorg	0	0	Inorg	0	NI	0	(0)	(1)	NI	(1)	1	1		0	D	1	10124-37-5
Calcium nitrate solutions (50% or less)	172																		
Calcium nitrate/ Magnesium nitrate/Potassium chloride solution	1734																		
		Inorg	0	0	Inorg	1	0	0	(0)	(1)	NI	(1)	(1)	1		0	D	1	
Calcium nitrate/Magnesium nitrate/Potassium chloride solution	173																		
Camelina oil	2440																		
		(0)	NI	(0)	(R)	(0)	(0)	(0)	(0)	(1)	NI	(1)	(0)	(1)		1	Fp	2	68956-68-3
Camelina oil	3767																		
Camphor oil, white	1897																		
		NI	NI	NI	NI	NI	NI	2	NI	(2)	NI	(2)	1	NI		3	FE	2	8008-51-3
Camphor oil	174																		
Caprolactam	436																		
		0	NI	0	R	1	0	1	1	2	NI	2	1	2		1	D	3	105-60-2
epsilon-Caprolactam (molten or aqueous solutions)	310																		
Carbolic oil	437																		
		(3)	3	(3)	(NR)	(3)	(1)	2	2	3	NI	3	3	3	ATNCM	2	FED	3	
Carbolic oil	176																		
Carbon disulphide	439																		
		2	1	1	NR	3	NI	2	(3)	4	NI	4	3A	3	RN	4	SD	3	75-15-0
Carbon disulphide	177																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Carboxylated phosphonated sodium allyl sulphonate polymer	2567																		
		0	NI	0	NR	0	0	(0)	(0)	(3)	NI	(3)	(3)	(3)	Ss	2	D	3	1416427-49-0
	4375																		
Cashew nut shell oil (untreated)	443																		
		0	NI	0	R	0	NI	(0)	(0)	(2)	NI	(2)	2	(2)	Ss	1	Fp	3	
Cashew nut shell oil (untreated)	179																		
Castor oil (containing less than 10% free fatty acids)	2314																		
		0	NI	0	R	(2)	NI	0	0	(1)	NI	(1)	1	1		1	Fp	2	
Castor oil	3044																		
Cesium formate solution	2384																		
		0	3	3	Inorg	2	NI	1	0	(2)	NI	(2)	2	2		NI	D	2	3495-36-1
Cesium formate solution (*)	3421																		
Cetyl/Eicosyl methacrylate (mixture)	445																		
		0	NI	0	(NR)	(0)	NI	0	(0)	(1)	NI	(1)	(1)	(1)		1	Fp	2	
Cetyl/Eicosyl methacrylate mixture	180																		
Chlorinated paraffins (C18 and above) with any level of chlorine	2024																		
		0	4	4	NR	0	2	0	0	(1)	NI	(1)	(1)	(1)	C	1	S	3	
Chlorinated paraffins (C18+) with any level of chlorine	183																		
Chlorinated paraffins (C10-C13) with 60% chlorine or more	2021																		
		5	5	5	NR	5	2	0	0	(1)	NI	(1)	1	1	C	0	S	3	
Chlorinated paraffins (C10-C13)	181																		
Chlorinated paraffins (C10- C13) with less than 60% chlorine	2020																		
		5	5	5	NR	5	3	(0)	(0)	(1)	NI	(1)	(1)	(1)	C	1	S	3	
Chlorinated paraffins (C10-C13) (60% chlorine or less)	2832																		
Chlorinated paraffins (C14-C17) with less than 1% shorter chain length	2112																		
		5	4	4	NR	6	3	0	0	(2)	NI	(2)	2	2	C	1	S	3	
Chlorinated paraffins (C14-C17) (with 50% chlorine or more, and less than 1% C13 or shorter chains)	182																		
Chloroacetic acid	450																		
		0	NI	0	R	2	0	2	3	(4)	NI	(4)	3C	3	A	1	D	3	79-11-8
Chloroacetic acid (80% or less)	184																		
Chlorobenzene	456																		
		2	2	2	NR	3	0	1	0	2	NI	2	2	0		3	S	2	108-90-7
Chlorobenzene	185																		
Chlorohydrins	463																		
		0	NI	0	R	0	NI	(2)	(2)	(3)	NI	(3)	(3A)	3	C	3	D	3	96-24-2
Chlorohydrins (crude)	187																		
N-(3-Chloro-2-hydroxypropyl) trimethylammonium chloride solution (75% or less)	2286																		
		0	0	0	NR	1	NI	0	0	(2)	NI	(2)	0	(2)	C	0	D	3	
N-(3-Chloro-2-hydroxypropyl)trimethyl ammonium chloride solution (75% or less)	2579																		
4-Chloro-2-methylphenoxyacetic acid, dimethylamine salt solution	1536																		
		2	NI	2	NI	2	NI	1	0	2	NI	2	1	1		0	S	2	
4-Chloro-2-methylphenoxyacetic acid, dimethylamine salt solution	62																		
Chloronitrobenzenes	467																		
		2	2	2	NR	3	NI	2	2	2	NI	2	1	1		1	S	2	25167-93-5
o-Chloronitrobenzene	533																		
1-(4-Chlorophenyl)-4,4-dimethyl-3-pentanone	1772																		
		3	3	3	NR	3	NI	0	0	(1)	NI	(1)	1	0		1	S	1	
1-(4-Chlorophenyl)-4,4- dimethyl-pentan-3-one	21																		
2-Chloropropionic acid	474																		
		0	NI	0	R	1	NI	1	(3)	2	NI	2	3A	3		1	D	3	598-78-7
2- or 3-Chloropropionic acid	36																		
3-Chloropropylene	478																		
		1	1	1	R	3	NI	1	0	2	NI	2	1	3	T	4	E	3	107-05-1
Allyl chloride	106																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Chlorosulphonic acid	479																		
		Inorg	0	0	Inorg	2	NI	(2)	(3)	4	NI	4	3C	3		0	D	3	7790-94-5
Chlorosulphonic acid	188																		
m-Chlorotoluene	481																		
		3	NI	3	NR	2	NI	2	0	(2)	NI	(2)	1	1		3	S	2	108-41-8
m-Chlorotoluene	426																		
o-Chlorotoluene	480																		
		3	3	3	NR	3	1	0	0	0	NI	0	1	1		3	S	1	95-49-8
Chlorotoluenes (mixed isomers)	189																		
o-Chlorotoluene	480																		
		3	3	3	NR	3	1	0	0	0	NI	0	1	1		3	S	1	95-49-8
o-Chlorotoluene	534																		
p-Chlorotoluene	482																		
		3	3	3	NR	3	0	0	0	0	NI	0	1	1		3	S	2	106-43-4
p-Chlorotoluene	551																		
Choline chloride, solutions	485																		
		0	NI	0	R	1	NI	0	(0)	(0)	NI	(0)	0	0		0	D	0	67-48-1
Choline chloride solutions	190																		
Choline hydroxide solution	2525																		
		0	(0)	0	R	1	0	(0)	(0)	(3)	NI	(3)	3	3		0	D	3	123-41-1
Choline hydroxide solution	4234																		
Cinnamaldehyde	2485																		
		1	(2)	(2)	R	2	0	1	1	(2)	NI	(2)	2	1	Ss	1	SD	2	104-55-2
Cinnamaldehyde	4061																		
Citric acid	493																		
		0	NI	0	R	1	0	0	(0)	(3)	NI	(3)	1	3		1	D	3	77-92-9
Citric acid (70% or less)	748																		
Citric juices	494																		
		0	0	0	Inorg	0	0	0	0	0	NI	0	0	0		0	D	0	
Water	740																		
Clay	495																		
		Inorg	0	0	Inorg	0	0	0	0	0	NI	0	0	0		0	S	0	
Clay slurry	191																		
Coal slurry	498																		
		Inorg	0	0	Inorg	0	0	0	0	0	NI	0	0	0		0	S	0	
Coal slurry	192																		
Coal tar	499																		
		(4)	4	4	NR	3	1	0	0	0	NI	0	2	2	CMR	2	S	3	8007-45-2
Coal tar	193																		
Coal tar naphtha	500																		
		3	NI	3	NR	3	NI	0	0	(1)	NI	(1)	1	1	C	4	FE	3	8030-30-6
Coal tar naphtha solvent	194																		
Coal tar pitch (molten)	491																		
		3	(3)	(3)	NR	(4)	(2)	0	0	(1)	NI	(1)	1	0	CM	1	S	3	65996-93-2
Coal tar pitch (molten) (*)	195																		
Cobalt naphthenate in solvent naphtha	501																		
		NI	NI	NI	NR	3	NI	0	(0)	(1)	NI	(1)	NI	1	C	3	FE	3	
Cobalt naphthenate in solvent naphtha	196																		
Cocoa butter	2342																		
		0	NI	0	R	0	NI	(0)	(0)	(1)	NI	(1)	(0)	(1)		1	Fp	2	
Cocoa butter	3096																		
Coconut acid oil	2370																		
		0	0	0	R	3	NI	(0)	(0)	(1)	NI	(1)	(1)	(1)		NI	Fp	2	
Coconut acid oil	3139																		
Coconut fatty acid distillate	2366																		
		0	NI	0	R	(3)	NI	0	(0)	(1)	NI	(1)	(1)	(1)		1	Fp	2	
Coconut fatty acid distillate	3130																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Coconut oil	503																		
		0	NI	0	R	1	NI	0	(0)	(1)	NI	(1)	0	(1)		1	Fp	2	8001-31-8
Coconut oil	2772																		
Coconut oil fatty acid	505																		
		0	0	0	(R)	(3)	NI	0	(0)	(1)	NI	(1)	(1)	(1)		1	Fp	2	61788-47-4
Coconut oil fatty acid	197																		
Coconut oil fatty acid methyl ester	506																		
		5	0	0	R	0	NI	(0)	(0)	(0)	NI	(0)	(0)	(1)		1	Fp	2	61788-59-8
Coconut oil fatty acid methyl ester	198																		
Concentrated filtrate of the neutralized reaction product of 5-[2-(methylthio)alkyl]imidazolidine-2,4-dione and potassium carbonate	2524																		
		0	NI	0	R	1	0	0	(0)	0	NI	0	0	0		0	D	0	
Concentrated filtrate of the neutralized reaction product of 5-[2-(methylthio)alkyl]imidazolidine-2,4-dione and potassium carbonate	4233																		
Copper salt of long chain(>C17) alkanoic acid (LOA)	2111																		
		0	NI	0	(R)	2	NI	0	0	(0)	NI	(0)	0	0		1	Fp	2	
Copper salt of long chain (C17+) alkanoic acid	2214																		
Corn oil	521																		
		0	NI	0	R	(2)	NI	0	(0)	(1)	NI	(1)	1	1		1	Fp	2	8001-30-7
Corn Oil	2781																		
Cotton seed oil	523																		
		0	NI	0	R	(2)	NI	(0)	(0)	(1)	NI	(1)	0	1		1	Fp	2	8001-29-4
Cotton seed oil	2783																		
Creosote (coal tar)	524																		
		(4)	(4)	(4)	NR	4	(2)	1	0	2	NI	2	2	1	CMRSs	1	S	3	8001-58-9
Creosote (coal tar) (amended)	199																		
Creosote (wood tar)	525																		
		NI	NI	NI	NR	5	NI	1	0	2	NI	2	2	1	CM	2	SD	3	8021-39-4
Creosote (wood)	200																		
Creosote (coal tar) C8-C22, MW 116-278	2514																		
		NI	(3)	(3)	(NR)	4	1	1	0	(2)	NI	(2)	2	1	CMRSs	2	S	3	
Creosote (coal tar) (C8-C22, MW 116-278)	4163																		
Cresol/Phenol/Xylenol mixture	2471																		
		(2)	(2)	(2)	R	(3)	(1)	1	2	3	NI	3	3B	3		2	SD	3	
Cresol/Phenol/Xylenol mixture	4021																		
Cresols (mixed isomers)	527																		
		2	2	2	R	3	(1)	2	2	4	NI	4	3A	3		2	SD	3	1319-77-3
Cresols (all isomers)	201																		
Cresylic acids, dephenolized	1875																		
		2	2	2	R	3	0	(2)	(2)	(3)	NI	(3)	(3A)	(3)		2	S	3	
Cresylic acid, dephenolized	202																		
Cresylic acid, sodium salt solution	1914																		
		(2)	(2)	(2)	(R)	(3)	(0)	1	(1)	(3)	NI	(3)	3	3	TCM	4	D	3	
Cresylic acid, sodium salt solution	203																		
Crotonaldehyde	528																		
		0	NI	0	NR	4	1	2	4	4	NI	4	2	3		4	D	3	4170-30-3
Crotonaldehyde	204																		
Crude Piperazine	2331																		
		0	NI	0	R	2	NI	(1)	(2)	(3)	NI	(3)	3	3	SsSr	0	D	3	
Crude Piperazine	2810																		
Crude Tall Oil	2357																		
		4	NI	4	R	2	0	0	0	(0)	NI	(0)	0	0	Ss	1	Fp	3	
Tall oil, crude	3118																		
1,5,9-Cyclododecatriene	534																		
		5	5	5	NR	4	NI	0	0	1	NI	1	2	1	A	2	F	3	4904-61-4
1,5,9-Cyclododecatriene	17																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Cycloheptane	535																		
		4	NI	4	(NR)	4	NI	(0)	0	(1)	NI	(1)	(0)	(1)		4	FE	2	291-64-5
Cycloheptane	205																		
Cyclohexane	536																		
		3	3	3	NR	3	NI	0	0	1	NI	1	0	1		4	E	2	110-82-7
Cyclohexane	206																		
Cyclohexane-1,2-dicarboxylic acid, diisononyl ester	2472																		
		0	3	3	R	0	0	0	0	(1)	NI	(1)	1	0		1	Fp	2	166412-78-8
Cyclohexane-1,2-dicarboxylic acid, diisononyl ester	3915																		
Cyclohexane oxidation products, sodium salts solution	2458																		
		0	NI	0	Inorg	1	0	0	(0)	(0)	NI	(0)	0	0		0	D	0	
Cyclohexane oxidation products, sodium salts solution	3739																		
Cyclohexanol	537																		
		1	NI	1	R	2	NI	0	0	0	NI	0	2	2		2	Fp	2	108-93-0
Cyclohexanol	207																		
Cyclohexanone	539																		
		0	1	1	R	1	0	1	1	1	NI	1	2	2		3	FED	2	108-94-1
Cyclohexanone	208																		
Cyclohexanone/Cyclohexanol mixture	1436																		
		1	1	1	R	2	NI	1	1	1	NI	1	2	2		2	FED	2	
Cyclohexanone, Cyclohexanol mixture	209																		
Cyclohexyl acetate	541																		
		2	NI	2	(R)	(2)	NI	0	0	(2)	NI	(2)	2	1		3	FED	2	622-45-7
Cyclohexyl acetate	210																		
Cyclohexylamine	542																		
		1	NI	1	R	2	NI	2	2	3	NI	3	3	3		3	D	3	108-91-8
Cyclohexylamine	211																		
1,3-Cyclopentadiene dimer (molten)	545																		
		3	3	3	NR	3	NI	2	0	2	NI	2	2	2		3	Fp	2	77-73-6
1,3-Cyclopentadiene dimer (molten)	11																		
Cyclopentane	546																		
		3	NI	3	NR	3	NI	(0)	(0)	0	NI	0	1	(1)		4	E	2	287-92-3
Cyclopentane	212																		
Cyclopentene	547																		
		2	NI	2	(R)	3	NI	1	1	0	NI	0	(2)	(0)	A	4	E	2	142-29-0
Cyclopentene	213																		
Decahydronaphthalene	551																		
		4	4	4	NR	3	NI	0	0	2	NI	2	2	1		3	F	1	91-17-8
Decahydronaphthalene	214																		
Decane	554																		
		5	NI	5	R	0	0	0	0	0	NI	0	1	0		3	F	1	124-18-5
Decane	2620																		
Decanoic acid	555																		
		4	NI	4	R	4	1	0	0	(2)	NI	(2)	2	2		1	Fp	2	334-48-5
Decanoic acid	215																		
1-Decene	558																		
		5	NI	5	R	4	2	0	0	0	NI	0	2	0	A	3	F	3	872-05-9
Decene	216																		
Decyl acetate	1767																		
		4	NI	4	NI	NI	NI	0	0	(1)	NI	(1)	(1)	(1)		1	F	1	112-17-4
Decyl acetate	217																		
Decyl acrylate	559																		
		5	NI	5	(R)	5	NI	0	0	(2)	NI	(2)	2	1		1	Fp	2	2156-96-9
Decyl acrylate	218																		
Decyloxytetrahydrothiophene dioxide	1859																		
		3	NI	3	NR	4	NI	0	0	(1)	NI	(1)	1	0		1	Fp	2	
Decyloxytetrahydrothiophene dioxide	220																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Dextrose solution	562																		
		0	0	0	R	0	NI	0	0	0	NI	0	0	(0)		0	D	0	50-99-7
Dextrose solution	221																		
Dextrose solution	562																		
		0	0	0	R	0	NI	0	0	0	NI	0	0	(0)		0	D	0	50-99-7
Glucose solution	361																		
Diacetone alcohol	563																		
		0	NI	0	R	1	0	0	0	(2)	NI	(2)	2	2		4	D	2	123-42-2
Diacetone alcohol	226																		
Dialkyldiphenylamines (LOA)	1852																		
		5	NI	5	NR	1	0	0	0	(0)	NI	(0)	0	0		1	FD	0	
Dialkyl (C8-C9) diphenylamines	2255																		
Dialkyl (C9 - C10) phthalates	2359																		
		(0)	(0)	(0)	(R)	(0)	(0)	(0)	(0)	(1)	NI	(1)	(1)	(1)		1	Fp	2	
Dialkyl (C9 - C10) phthalates	3121																		
Dialkyl phthalates C9-C13	566																		
		(0)	(4)	(4)	(NR)	(0)	(2)	(0)	(0)	(1)	NI	(1)	(1)	(1)	R	1	Fp	3	
Dialkyl (C7-C13) phthalates	227																		
2,6-Diaminohexanoic acid phosphonate mixed salts solution	2469																		
		1	NI	1	NR	1	(0)	(1)	(1)	(3)	NI	(3)	(3)	(3)		NI	D	3	
2,6-Diaminohexanoic acid phosphonate mixed salts solution	3989																		
Diammonium hydrogen phosphate	98																		
		0	0	0	Inorg	1	NI	0	0	(0)	NI	(0)	(1)	(1)		0	D	1	7783-28-0
Ammonium hydrogen phosphate solution	117																		
Dibromomethane	574																		
		1	NI	1	NR	(2)	NI	1	0	0	NI	0	(2)	(2)		NI	SD	2	74-95-3
Dibromomethane	228																		
Di-n-butylamine	577																		
		2	NI	2	R	3	NI	2	2	3	NI	3	3	3		3	FD	3	111-92-2
Dibutylamine	231																		
Di-butyl ether	578																		
		3	3	3	NR	2	NI	0	0	0	NI	0	1	1		3	FE	2	142-96-1
n-Butyl ether	475																		
Dibutyl hydrogen phosphonate	1857																		
		1	NI	1	NI	2	NI	0	0	(3)	NI	(3)	3	3		1	F	3	1809-19-4
Dibutyl hydrogen phosphonate	229																		
2,4-Di-tert-butyl phenol	2083																		
		5	4	4	NR	4	NI	NI	NI	NI	NI	NI	NI	NI		1	NI	NI	96-76-4
2,4-Di-tert-butylphenol	2339																		
2,6-Di-tert-butyl phenol	2082																		
		4	NI	4	NR	4	NI	0	0	(1)	NI	(1)	1	1		1	Fp	2	128-39-2
2,6-Di-tert-butylphenol	2250																		
Di-n-butyl phthalate	582																		
		4	4	4	R	4	1	0	0	1	NI	1	0	1	R	1	S	3	84-74-2
Dibutyl phthalate	230																		
Dibutyl terephthalate	2430																		
		5	(3)	(3)	R	4	2	0	0	(0)	NI	(0)	0	0		1	S	0	
Dibutyl terephthalate	3596																		
Dichlorobenzene (all isomers)	333																		
		3	4	4	NR	3	1	1	0	1	NI	1	(2)	2	CMR	2	S	3	
Dichlorobenzene (all isomers)	232																		
3,4-Dichlorobut-1-ene	2079																		
		2	2	2	NR	3	NI	1	0	2	NI	2	2	3		3	S	3	760-23-6
3,4-Dichloro-1-butene	56																		
1,1-Dichloroethane	590																		
		1	NI	1	NR	1	NI	1	(1)	0	NI	0	2	2		4	SD	2	75-34-3
1,1-Dichloroethane	4																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
1,2-Dichloroethane	591																		
		1	1	1	NR	2	0	1	0	2	NI	2	1	2	C	4	SD	3	107-06-2
Ethylene dichloride	330																		
1,6-Dichlorohexane	593																		
		3	NI	3	NR	3	NI	0	(0)	(0)	NI	(0)	0	0		2	S	0	2163-00-0
1,6-Dichlorohexane	19																		
Dichloromethane	594																		
		1	2	2	NR	1	0	1	0	0	NI	0	2	2	C	0	SD	3	75-09-2
Dichloromethane	234																		
2,4-Dichlorophenol	596																		
		3	2	2	NR	3	2	3	2	3	NI	3	3	3		1	S	3	120-83-2
2,4-Dichlorophenol	30																		
2,4-dichlorophenoxyacetic acid, choline salt	2523																		
		2	2	2	NR	1	1	1	0	0	NI	0	1	2		0	D	2	1048373-72-3
2,4-dichlorophenoxyacetic acid, choline salt	4232																		
2,4-Dichlorophenoxyacetic acid, diethanolamine salt, solution	599																		
		0	1	1	R	2	NI	1	0	(3)	NI	(3)	1	3		0	D	3	
2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution	32																		
2,4-Dichlorophenoxyacetic acid, dimethylamine salt, 70 % or less solution	600																		
		0	1	1	R	3	NI	1	0	(3)	NI	(3)	1	3		0	D	3	
2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution (70% or less)	33																		
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt soln.	602																		
		0	NI	0	R	2	NI	1	0	(3)	NI	(3)	(1)	3		0	D	3	
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution	34																		
1,1-Dichloropropane	605																		
		2	1	1	NR	2	1	0	0	1	NI	1	1	1		3	SD	1	78-99-9
1,1-Dichloropropane	5																		
1,2-Dichloropropane	606																		
		2	1	1	NR	2	0	1	0	2	NI	2	2	2		4	SD	2	78-87-5
1,2-Dichloropropane	9																		
1,3-Dichloropropane	607																		
		2	1	1	NR	2	1	0	NI	NI	NI	NI	NI	NI		3	SD	NI	142-28-9
1,3-Dichloropropane	12																		
Dichloropropane and dichloropropene, mixture	608																		
		(2)	(1)	(1)	(NR)	(4)	(1)	2	1	2	NI	2	3	3	CSs	4	SD	3	8003-19-8
Dichloropropene/Dichloropropane mixtures	235																		
1,3-Dichloropropene	612																		
		1	NI	1	NR	4	1	2	1	2	NI	2	3	3	CSs	3	SD	3	542-75-6
1,3-Dichloropropene	13																		
2,2-Dichloropropionic acid	609																		
		2	2	2	NR	2	NI	1	0	(3)	NI	(3)	3	3		1	D	3	75-99-0
2,2-Dichloropropionic acid	28																		
Di-(2-chloro-iso-propyl) ether	615																		
		2	2	2	NR	2	NI	2	0	2	NI	2	0	2		2	SD	2	108-60-1
2,2'-Dichloroisopropyl ether	25																		
Dicyclopentadiene(80-90%)/Co-dimers(10-20%), mixtures	2389																		
		2	3	3	NR	3	0	2	0	3	NI	3	2	2	AR	3	FED	3	
Dicyclopentadiene, Resin Grade, 81-89%	3559																		
Diethanolamine	620																		
		0	NI	0	R	1	0	1	0	0	NI	0	2	3	T	1	D	3	111-42-2
Diethanolamine	236																		
Diethylamine	621																		
		0	NI	0	R	2	NI	1	2	3	NI	3	3C	3		4	DE	3	109-89-7
Diethylamine	240																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
2,6-Diethylaniline	1437																		
		3	3	3	NR	2	NI	1	1	(2)	NI	(2)	1	2		1	FD	2	579-66-8
2,6-Diethylaniline	35																		
Diethyl benzene (mixed isomers)	624																		
		4	4	4	NR	3	NI	0	(0)	(2)	NI	(2)	2	1		3	F	2	25340-17-4
Diethylbenzene	242																		
Di-(2-ethylbutyl) phthalate	625																		
		5	NI	5	R	0	2	0	0	(1)	NI	(1)	1	(1)	R	1	Fp	3	84-75-3
Di-(2-ethylbutyl) phthalate	2750																		
Diethylene glycol	628																		
		0	NI	0	R	0	0	1	0	2	NI	2	1	1		1	D	2	111-46-6
Diethylene glycol	243																		
Diethylene glycol di-n-butyl ether	629																		
		2	NI	2	NI	1	NI	0	0	(1)	NI	(1)	1	1		1	FD	1	112-73-2
Diethylene glycol dibutyl ether	244																		
Diethylene glycol diethyl ether	630																		
		0	NI	0	NR	0	NI	1	0	(2)	NI	(2)	(2)	2		2	D	2	112-36-7
Diethylene glycol diethyl ether	245																		
Diethylene glycol initiated polyoxypropylene diamine	2353																		
		0	NI	0	NR	2	NI	0	0	(3)	NI	(3)	3B	(3)		1	D	3	
Polyetheramine	2946																		
Diethylene glycol initiated polyoxypropylene diamine	2353																		
		0	NI	0	NR	2	NI	0	0	(3)	NI	(3)	3B	(3)		1	D	3	
Diethylene glycol initiated polyoxypropylene diamine	3113																		
Diethylene glycol phthalate	1438																		
		2	NI	2	NR	1	NI	0	0	(2)	NI	(2)	(1)	2		1	S	2	
Diethylene glycol phthalate	247																		
Diethylene triamine	638																		
		0	1	1	(R)	2	NI	1	3	3	NI	3	3A	3	Ss	1	FD	3	111-40-0
Diethylenetriamine	248																		
Diethylenetriamine pentaacetic acid, pentapotassium salt solution (40%) (**)	2466																		
		1	NI	1	NR	2	NI	NI	NI	NI	NI	NI	NI	NI		0	D	NI	
Diethylenetriamine pentaacetic acid, pentapotassium salt (40% solution)	3929																		
Diethylenetriamine pentaacetic acid, pentasodium salt (40% solution in water)	2076																		
		0	NI	0	NR	0	NI	0	(0)	(0)	NI	(0)	0	0		0	D	0	
Diethylenetriaminepentaacetic acid, pentasodium salt solution	249																		
Diethylenetriamine pentamethylene phosphonic acid, pentasodium salt solution (47 %) (**)	2467																		
		0	NI	0	R	2	NI	NI	NI	NI	NI	NI	NI	NI		1	D	NI	
Diethylenetriamine pentamethylene phosphonic acid, pentasodium salt solution	3930																		
Diethyl ethanolamine	622																		
		0	NI	0	NR	3	NI	1	1	2	NI	2	3	3		3	D	3	100-37-8
Diethylaminoethanol	241																		
Diethyl ether	640																		
		0	1	1	NR	0	NI	1	0	0	NI	0	1	1		4	DE	2	60-29-7
Diethyl ether (*)	237																		
Di-(2-ethylhexyl) adipate	641																		
		0	2	2	R	4	2	0	0	0	NI	0	1	1	R	1	Fp	3	103-23-1
Di-(2-ethylhexyl) adipate	222																		
Di-(2-ethylhexyl) phosphoric acid	643																		
		(2)	1	1	NR	2	NI	0	1	(2)	NI	(2)	2	2		1	Fp	2	298-07-7
Di-(2-ethylhexyl) phosphoric acid	223																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Di-(2-ethylhexyl) phthalate	642																		
		0	4	4	R	0	0	0	0	1	NI	1	1	1	R	1	Fp	3	117-81-7
Di-(2-ethylhexyl) phthalate	2751																		
Diethyl phthalate	648																		
		3	3	3	R	2	0	0	0	(1)	NI	(1)	1	1		1	S	1	84-66-2
Diethyl phthalate	238																		
Diethyl sulphate	649																		
		1	NI	1	R	(2)	NI	1	2	3	NI	3	2	3	CM	1	SD	3	64-67-5
Diethyl sulphate	239																		
Diglycidyl ether of Bisphenol A	653																		
		3	NI	3	NR	4	NI	0	0	(2)	NI	(2)	1	2	Ss	1	S	2	1675-54-3
Diglycidyl ether of bisphenol A	250																		
Diglycidyl ether of Bisphenol F	728																		
		0	NI	0	NR	3	NI	0	(0)	(2)	NI	(2)	1	(2)	SsR	1	S	3	55492-52-9
Diglycidyl ether of bisphenol F	251																		
Diheptyl phthalate	655																		
		0	(4)	(4)	R	0	NI	0	0	(1)	NI	(1)	1	1		1	Fp	3	3648-21-3
Diheptyl phthalate	252																		
Di-n-hexyl adipate	656																		
		5	NI	5	(NR)	5	0	0	0	(1)	NI	(1)	0	1		1	FE	1	110-33-8
Di-n-hexyl adipate	224																		
Di-hexyl phthalate	2125																		
		5	NI	5	R	0	2	0	0	(1)	NI	(1)	1	1	R	1	Fp	3	84-75-3
Dihexyl phthalate	253																		
1,4-Dihydro-9,10-dihydroxy anthracene disodium salt (soln.)	657																		
		1	NI	1	NI	1	NI	0	NI	NI	NI	NI	NI	NI		0	D	NI	
1,4-Dihydro-9,10-dihydroxyanthracene, disodium salt solution	15																		
Diisobutene	575																		
		4	4	4	NR	3	NI	0	0	0	NI	0	1	0		4	FE	2	11071-47-9
Diisobutylene	257																		
Diisobutylamine	576																		
		(2)	NI	(2)	(R)	(3)	NI	2	(2)	2	NI	2	(3)	(3)		3	FED	3	110-96-3
Diisobutylamine	256																		
Diisobutyl ketone	579																		
		3	NI	3	R	2	NI	0	0	2	NI	2	2	2		3	F	2	108-83-8
Diisobutyl ketone	254																		
Diisobutyl phthalate	581																		
		4	(4)	4	R	(4)	1	0	0	1	NI	1	0	0	R	1	S	3	84-69-5
Diisobutyl phthalate	255																		
Diisodecyl phthalate	619																		
		0	0	0	(R)	0	(0)	0	0	(1)	NI	(1)	0	1		1	Fp	2	26761-40-0
Diisodecyl phthalate	3119																		
Diisoheptyl phthalate	2391																		
		0	(4)	(4)	R	0	0	0	0	(1)	NI	(1)	1	1	R	1	Fp	3	
Diisoheptyl phthalate	3561																		
Diisononyl adipate	690																		
		0	NI	0	R	0	0	0	0	(1)	NI	(1)	1	1		1	Fp	2	33703-08-1
Diisononyl adipate	258																		
Diisononyl phthalate	691																		
		0	0	0	R	0	0	0	0	(0)	NI	(0)	0	0		1	Fp	2	
Diisononyl phthalate	3120																		
Diisooctyl phthalate	693																		
		0	4	4	(R)	0	0	0	0	(1)	NI	(1)	1	0		1	Fp	2	27554-26-3
Diisooctyl phthalate	259																		
Diisopropanolamine	703																		
		0	NI	0	NR	1	NI	0	0	0	NI	0	2	3		1	FD	3	110-97-4
Diisopropanolamine	260																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Diisopropylamine	705																		
		1	NI	1	NR	2	0	1	1	2	NI	2	3	3		4	ED	3	108-18-9
Diisopropylamine	261																		
Diisopropyl benzene (mixed isomers)	2220																		
		5	4	4	NR	4	NI	0	0	2	NI	2	2	1		2	F	2	
Diisopropylbenzene (all isomers)	262																		
1,3-Diisopropylbenzene	706																		
		5	4	4	NR	4	NI	0	0	2	NI	2	2	1		2	F	2	25321-09-9
1,3-Diisopropyl benzene	2626																		
Diisopropyl ether	711																		
		1	NI	1	NR	2	NI	0	0	0	NI	0	1	2		4	E	2	108-20-3
Isopropyl ether	406																		
Diisopropylnaphthalene, mixed isomers	712																		
		5	4	4	NR	3	NI	0	0	(1)	NI	(1)	1	1		1	Fp	2	38640-62-9
Diisopropylnaphthalene	263																		
Dimethyl acetamide	658																		
		0	NI	0	R	1	NI	0	0	2	NI	2	1	2		2	D	2	127-19-5
N,N-Dimethylacetamide solution (40% or less)	466																		
Dimethyl acetamide	658																		
		0	NI	0	R	1	NI	0	0	2	NI	2	1	2		2	D	2	127-19-5
N,N-Dimethylacetamide	2730																		
Dimethyl adipate	659																		
		1	NI	1	(R)	4	NI	0	0	(0)	NI	(0)	1	1		1	SD	2	627-93-0
Dimethyl adipate	264																		
Dimethyl carbonate	2570																		
		(0)	NI	(0)	R	1	0	0	0	NI	2	2	0	0		4	D	2	616-38-6
	4378																		
Dimethylamine (40-50% aq.sol.)	661																		
		0	NI	0	R	3	0	2	0	2	NI	2	3B	3	Ss	4	DE	3	124-40-3
Dimethylamine solution (45% or less)	270																		
Dimethylamine (40-50% aq.sol.)	661																		
		0	NI	0	R	3	0	2	0	2	NI	2	3B	3	Ss	4	DE	3	124-40-3
Dimethylamine solution (greater than 45% but not greater than 55%)	271																		
Dimethylamine (40-50% aq.sol.)	661																		
		0	NI	0	R	3	0	2	0	2	NI	2	3B	3	Ss	4	DE	3	124-40-3
Dimethylamine solution (greater than 55% but not greater than 65%)	272																		
N,N-Dimethyl cyclohexylamine	665																		
		2	NI	2	NR	2	NI	1	2	3	NI	3	3C	3		3	FD	3	98-94-2
N,N-Dimethylcyclohexylamine	467																		
Dimethyl disulphide	1616																		
		1	NI	1	NR	3	2	2	0	2	NI	2	1	1		4	SD	2	624-92-0
Dimethyl disulphide	2504																		
N,N-Dimethyldodecylamine	2126																		
		3	NI	3	R	4	NI	1	(1)	(3)	NI	(3)	3	3		2	F	3	112-18-5
N,N-Dimethyldodecylamine	468																		
Dimethylethanolamine	667																		
		0	NI	0	R	2	NI	1	1	2	NI	2	3	3		3	D	3	108-01-0
Dimethylethanolamine	273																		
Dimethyl formamide	676																		
		0	0	0	R	1	0	0	1	2	NI	2	1	2	R	3	D	3	68-12-2
Dimethylformamide	274																		
Dimethyl glutarate	670																		
		0	NI	0	R	3	NI	0	0	2	NI	2	3	2	A	1	SD	3	26717-67-9
Dimethyl glutarate	265																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Dimethyl hydrogen phosphite	673																		
		0	NI	0	NR	2	NI	1	0	0	NI	0	1	1		3	D	1	868-89-9
Dimethyl hydrogen phosphite	266																		
2,2-Dimethyloctanoic acid	675																		
		3	NI	3	R	4	1	0	0	(2)	NI	(2)	2	2		4	Fp	2	29662-90-6
Dimethyl octanoic acid	267																		
Dimethyl phthalate	678																		
		2	2	2	R	2	0	0	0	(1)	NI	(1)	0	1		1	SD	1	131-11-3
Dimethyl phthalate	268																		
2,2-Dimethylpropane-1,3-diol	679																		
		0	0	0	NR	0	0	0	0	0	NI	0	2	2		1	FD	2	126-30-7
2,2-Dimethylpropane-1,3-diol (molten or solution)	29																		
Dimethyl succinate	681																		
		0	NI	0	NI	2	NI	0	0	0	NI	0	0	2		2	SD	2	106-65-0
Dimethyl succinate	269																		
Dinitrotoluene	688																		
		2	2	2	NR	4	2	2	(2)	(2)	NI	(2)	1	0	CMR	1	S	3	25321-14-6
Dinitrotoluene (molten)	276																		
Dinonylphenol-formaldehyde-nonylphenol copolymer (62% in paraffin oil)	2557																		
		(5)	NI	(5)	NR	0	0	0	0	(0)	NI	(0)	0	0		3	Fp	2	63494-86-0
	4315																		
Dinonyl phthalate	689																		
		0	NI	0	R	0	0	0	0	(1)	NI	(1)	1	1		1	Fp	2	84-76-4
Dinonyl phthalate	2993																		
Di-n-octyl phthalate	692																		
		0	(4)	(4)	(R)	0	0	0	0	(1)	NI	(1)	1	(1)		1	Fp	2	117-84-0
Dioctyl phthalate	277																		
1,4-Dioxane	682																		
		0	0	0	NR	0	0	0	0	0	NI	0	0	2	C	4	D	3	123-91-1
1,4-Dioxane	16																		
Dipentene	686																		
		4	NI	4	NR	2	NI	0	0	(2)	NI	(2)	2	2	Ss	3	F	3	138-86-3
Dipentene	278																		
Diphenyl	694																		
		3	4	4	R	4	1	0	0	(1)	NI	(1)	0	1		1	S	1	92-52-4
Diphenyl	279																		
Diphenylamine (molten)	2186																		
		3	3	3	NR	3	1	0	0	(1)	NI	(1)	1	1		1	S	1	
Diphenylamine (molten)	285																		
Diphenylamine, reaction product with 2,4,4-trimethylpentene	1500																		
		NI	1	1	NR	3	NI	0	0	(1)	NI	(1)	1	1		1	Fp	2	
Diphenylamine, reaction product with 2,2,4-Trimethylpentene	286																		
Diphenylamines, alkylated	1770																		
		5	NI	5	NR	(3)	NI	0	0	(1)	NI	(1)	(1)	(1)		1	F	2	
Diphenylamines, alkylated	287																		
Diphenyl/Diphenyl ether (mixtures)	698																		
		NI	NI	4	NR	4	1	0	0	(1)	NI	(1)	1	1		1	S	1	8004-13-5
Diphenyl/Diphenyl ether mixtures	283																		
Diphenyl ether	699																		
		4	4	4	NR	4	NI	0	0	0	NI	0	1	1		1	S	1	101-84-8
Diphenyl ether	281																		
Diphenyl ether/ Biphenyl phenyl ether mixtures	702																		
		5	NI	5	NR	4	NI	0	0	0	NI	0	1	1		1	S	1	
Diphenyl ether/Diphenyl phenyl ether mixture	282																		
Diphenylmethane-4,4'-diisocyanate	700																		
		5	2	2	NR	0	0	0	0	3	NI	3	2	2	SsSr	1	S	3	101-68-8
Diphenylmethane diisocyanate	288																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Diphenylol propane-epichlorohydrin resins	2237																		
		3	NI	3	NR	4	NI	0	0	(2)	NI	(2)	1	2		1	S	2	
Diphenylol propane-epichlorohydrin resins	290																		
Di-n-propylamine	704																		
		1	NI	1	NR	3	NI	2	2	2	NI	2	3C	3		4	FED	3	142-84-7
Di-n-propylamine	225																		
Dipropylene glycol	707																		
		0	1	1	R	0	NI	0	0	0	NI	0	0	1		1	D	1	25265-71-8
Dipropylene glycol	291																		
Dipropylene glycol dibenzoate	708																		
		3	NI	3	R	3	NI	0	0	0	NI	0	0	0		1	S	0	94-51-9
Dipropylene glycol dibenzoate	2431																		
Di-n-propyl phthalate	713																		
		3	NI	3	(R)	3	NI	(0)	(0)	(1)	NI	(1)	(1)	(1)	R	1	S	3	131-16-8
Di-n-propyl phthalate	2752																		
Distilled Resin Oil, DRO	2299																		
		(3)	NI	(3)	(NR)	(3)	NI	0	0	(2)	NI	(2)	2	1	MN	3	FE	3	
Resin oil, distilled	2958																		
Dithocarbamate ester (C7-C35)	2185																		
		NI	2	2	NR	4	NI	0	0	(1)	NI	(1)	1	1		1	S	1	
Dithiocarbamate ester (C7-C35)	2371																		
Ditridecyl adipate	2351																		
		0	NI	0	NR	0	NI	0	0	(2)	NI	(2)	2	1		1	Fp	2	
Ditridecyl adipate	293																		
Ditridecyl phthalate	714																		
		0	(0)	0	NR	0	(0)	0	0	(1)	NI	(1)	1	(1)		1	Fp	2	119-06-2
Ditridecyl phthalate	2994																		
Diundecyl phthalate	715																		
		0	(0)	0	NR	0	0	0	0	(1)	NI	(1)	1	1		1	Fp	2	3648-20-2
Diundecyl phthalate	294																		
Dodecane	718																		
		5	NI	5	(R)	0	NI	0	0	(1)	NI	(1)	(1)	(0)		3	Fp	2	112-40-3
Dodecane (all isomers)	295																		
tert-Dodecanethiol	2233																		
		5	4	4	NR	0	0	0	0	(2)	NI	(2)	2	1	Ss	2	F	3	
tert-Dodecanethiol	2418																		
Dodecanoic acid, 1-methylethyl ester	2571																		
		5	NI	5	R	0	(0)	0	(0)	(2)	NI	(2)	0	0		1	F	2	10233-13-3
	4379																		
1-Dodecanol	719																		
		5	2	2	R	4	1	0	0	(1)	NI	(1)	1	(1)		1	Fp	2	112-53-8
Dodecyl alcohol	298																		
1-Dodecene	2473																		
		5	NI	5	R	0	NI	0	0	1	0	0	1	(0)	A	2	F	3	112-41-4
1-Dodecene	3990																		
Dodecene (all isomers)	720																		
		5	NI	5	NR	4	NI	0	0	1	0	0	1	0	A	(2)	F	3	
Dodecene (all isomers)	296																		
2-Dodecenyl succinic acid, dipotassium salt, solution	727																		
		4	NI	4	NR	1	NI	(0)	(0)	NI	NI	NI	NI	NI		0	D	NI	57195-28-5
Dodecenylsuccinic acid, dipotassium salt solution	297																		
Dodecylamine/Tetradecylamine mixture	721																		
		3	NI	3	R	4	NI	1	0	(3)	NI	(3)	3	3		2	F	3	
Dodecylamine/Tetradecylamine mixture	303																		
Dodecyl benzene	126																		
		0	NI	0	NR	0	3	0	0	(2)	NI	(2)	(2)	(1)		1	F	2	123-01-3
Dodecylbenzene	304																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Dodecyl benzene sulphonic acid (contains 1.5% Sulphuric acid)	1739																		
		NI	NI	3	R	3	1	1	(1)	(2)	NI	(2)	(1)	(1)		1	D	2	
Alkyl (C11-C17) benzene sulphonic acid	101																		
Dodecyl diphenyl oxide disulphonate (solns.)	723																		
		(5)	NI	5	NR	4	1	1	0	(3)	NI	(3)	1	3		0	D	3	
Dodecyl diphenyl ether disulphonate solution	299																		
Dodecyl hydroxypropyl sulphide (LOA)	1861																		
		5	NI	5	NI	4	NI	0	0	(0)	NI	(0)	0	0		1	FD	0	
Dodecyl hydroxypropyl sulphide	2252																		
n-Dodecyl mercaptan	2462																		
		5	3	3	NR	5	NI	0	0	(3)	NI	(3)	3	(3)	Ss	1	F	3	
n-Dodecyl mercaptan	3743																		
Dodecyl/octadecyl methacrylate (mixtures)	2116																		
		(5)	NI	(5)	(NR)	(0)	NI	0	0	(1)	NI	(1)	1	(1)		2	Fp	2	
Dodecyl/Octadecyl methacrylate mixture	1717																		
Dodecyl/pentadecyl methacrylate (mixture)	724																		
		(5)	NI	(5)	(NR)	(0)	NI	0	(0)	(1)	NI	(1)	(1)	(1)		1	Fp	2	
Dodecyl/Pentadecyl methacrylate mixture	302																		
Dodecyl phenol	725																		
		0	4	4	NI	4	(3)	0	0	(3)	NI	(3)	3	2	R	1	Fp	3	27193-86-8
Dodecyl phenol	301																		
Dodecyl-, Tetradecyl-, Hexadecyl-dimethylamine mixture	2248																		
		3	NI	3	R	5	2	1	(1)	(3)	NI	(3)	3C	3		1	F	3	
Alkyl (C12+) dimethylamine	2485																		
Dodecylxylene	1763																		
		0	NI	0	NI	0	NI	0	0	(1)	NI	(1)	1	1		1	Fp	2	
Dodecyl Xylene	306																		
Epichlorohydrin	731																		
		0	0	0	R	2	NI	2	2	3	NI	3	3A	3	CSs	3	D	3	106-89-8
Epichlorohydrin	309																		
Ethanol	732																		
		0	NI	0	R	0	NI	0	0	0	NI	0	1	2		4	D	2	64-17-5
Ethyl alcohol	315																		
Ethanolamine	733																		
		0	NI	0	R	2	0	1	1	3	NI	3	3A	3		2	D	3	141-43-5
Ethanolamine	311																		
Ethanoltriazine (aqueous solution)	2411																		
		(0)	NI	(0)	R	3	NI	1	0	4	NI	4	0	2	Ss	1	D	3	4719-04-4
1,3,5-Hexahydrotriethanol-1,3,5-triazine solution	3687																		
Ethoxylated long chain (>C16)alkyloxyalkanamine (LOA)	2103																		
		5	NI	5	NR	1	NI	0	0	(3)	NI	(3)	3	(3)		1	Fp	3	
Ethoxylated long chain (C16+) alkyloxyalkylamine	2203																		
Ethoxylated tallow amine (>95%)	2313																		
		0	NI	0	NR	4	NI	1	(1)	3	NI	3	2	3	Ss	1	Fp	3	
Ethoxylated tallow amine (> 95%)	2959																		
Ethoxylated tallow amine, glycol mixture	2252																		
		2	NI	2	NR	6	NI	1	0	3	NI	3	2	3		1	D	3	
Ethoxylated tallow amine, glycol mixture	2476																		
Ethyl acetate	735																		
		0	2	2	R	1	0	0	0	1	NI	1	0	1		4	DE	2	141-78-6
Ethyl acetate	312																		
Ethyl acetoacetate	736																		
		0	0	0	R	1	NI	0	0	(1)	NI	(1)	1	1		2	D	1	141-97-9
Ethyl acetoacetate	313																		
Ethyl acrylate	734																		
		1	NI	1	R	3	1	1	2	2	NI	2	2	2	CSs	4	ED	3	140-88-5
Ethyl acrylate	314																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Ethylamine	1016																		
		0	NI	0	R	2	NI	2	2	1	NI	1	3	3		4	GD	3	75-04-7
Ethylamine (*)	322																		
Ethylamine solutions (72% or less)	2219																		
		NI	NI	0	R	2	NI	2	2	1	NI	1	3	3		4	DE	3	
Ethylamine solutions (72% or less)	323																		
Ethyl amyl ketone	1784																		
		2	NI	2	NI	2	NI	0	0	(2)	NI	(2)	2	NI		3	FD	2	106-68-3
Ethyl amyl ketone	316																		
Ethylbenzene	740																		
		3	2	2	R	3	(1)	0	0	0	NI	0	2	2	T	4	FE	3	100-41-4
Ethylbenzene	324																		
N-Ethyl butylamine	745																		
		1	NI	1	NI	NI	NI	1	1	2	NI	2	3	3		4	FED	3	13360-63-9
N-Ethylbutylamine	477																		
Ethyl tert-butyl ether	2085																		
		1	NI	1	NR	2	0	0	0	(1)	0	0	1	0		4	E	1	637-92-3
Ethyl tert-butyl ether (amended)	320																		
Ethyl butyrate	748																		
		1	NI	1	NI	2	NI	0	0	(2)	NI	(2)	2	NI		3	FED	2	105-54-4
Ethyl butyrate	317																		
Ethyl cyclohexane	751																		
		4	4	4	NR	3	NI	(0)	(0)	(1)	NI	(1)	(1)	(1)		3	FE	2	1678-91-7
Ethylcyclohexane	325																		
N-Ethyl cyclohexylamine	752																		
		2	NI	2	NI	(3)	NI	1	2	2	NI	2	3	3		3	FED	3	5459-93-8
N-Ethylcyclohexylamine	478																		
S-Ethyl dipropylthiocarbamate	2081																		
		3	2	2	NI	3	NI	1	1	2	NI	2	2	(2)	N	1	F	3	759-94-4
S-Ethyl dipropylthiocarbamate	2302																		
Ethylene carbonate	755																		
		0	NI	0	R	0	NI	0	0	(2)	NI	(2)	1	2		1	SD	2	96-49-1
Ethylene carbonate	326																		
Ethylene chlorohydrin	756																		
		0	0	0	R	3	NI	2	3	4	NI	4	2	3		3	D	3	107-07-3
Ethylene chlorohydrin	327																		
Ethylene cyanohydrin	757																		
		0	0	0	NI	2	NI	1	0	(2)	NI	(2)	1	2		1	D	2	109-78-4
Ethylene cyanohydrin	328																		
Ethylene diamine	758																		
		0	1	1	R	3	1	1	2	1	NI	1	3	3	SsSr	3	D	3	107-15-3
Ethylenediamine	343																		
Ethylene diamine, tetra acetic acid, di- and tetra-sodium salt	759																		
		0	NI	0	NR	2	0	1	(1)	(2)	NI	(2)	1	2		0	D	2	64-02-8
Ethylenediaminetetraacetic acid, tetrasodium salt solution	344																		
Ethylene dibromide	760																		
		1	2	2	NR	3	NI	2	2	2	NI	2	3	3	CRT	0	SD	3	106-93-4
Ethylene dibromide	329																		
Ethylene glycol	761																		
		0	NI	0	R	0	NI	1	(1)	(1)	NI	(1)	0	0		1	D	1	107-21-1
Ethylene glycol	331																		
Ethylene glycol acrylate	869																		
		0	NI	0	R	4	NI	1	3	3	NI	3	3	3	MSs	1	D	3	818-61-1
2-Hydroxyethyl acrylate	51																		
Ethylene glycol butyl ether acetate	764																		
		1	NI	1	R	2	NI	1	1	(1)	NI	(1)	1	1		2	FD	1	112-07-2
Ethylene glycol butyl ether acetate	334																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Ethylene glycol diacetate	765																		
		0	NI	0	NI	2	NI	0	0	(1)	NI	(1)	1	NI		1	D	1	111-55-7
Ethylene glycol diacetate	335																		
Ethylene glycol ethyl ether acetate	767																		
		0	NI	0	R	2	0	1	0	1	NI	1	1	1	R	3	D	3	111-15-9
2-Ethoxyethyl acetate	41																		
Ethylene glycol methyl butyl ether	772																		
		1	NI	1	NI	1	NI	NI	NI	NI	NI	NI	NI	NI		4	D	NI	13343-98-1
Ethylene glycol methyl butyl ether	336																		
Ethylene glycol methyl ether acetate	773																		
		0	NI	0	R	2	NI	0	0	(0)	NI	(0)	(1)	1	R	3	D	3	110-49-6
Ethylene glycol methyl ether acetate	337																		
Ethylene glycol monoacetate	762																		
		0	NI	0	R	2	NI	0	0	(3)	NI	(3)	NI	(3)		1	D	3	542-59-6
Ethylene glycol acetate	333																		
Ethylene glycol monoalkyl ethers	2268																		
		0	NI	0	R	2	NI	1	2	2	NI	2	1	2		3	D	2	
Ethylene glycol monoalkyl ethers	338																		
Ethylene glycol monoalkyl ethers (31% or less)/Ethylene glycol (25% or less)/Ethoxylated alcohols (15% or less)/Ethoxylated imidazolines (10% or less)/2-mercaptoethanol (5% or less) solution	2543																		
		(3)	NI	(3)	(R)	(3)	(0)	(1)	(2)	(3)	NI	(3)	(2)	(3)	TSs	2	D	3	
Ethylene glycol monoalkyl ethers (31% or less)/Ethylene glycol (25% or less)/Ethoxylated alcohols (15% or less)/Ethoxylated imidazolines (10% or less)/2-mercaptoethanol (5% or less) solution	4283																		
Ethylene glycol monoethyl ether	766																		
		0	NI	0	R	0	0	0	0	1	NI	1	2	2		3	D	3	110-80-5
2-Ethoxyethanol	40																		
Ethylene glycol phenyl ether	775																		
		1	NI	1	R	1	0	1	0	0	NI	0	1	2		1	SD	2	122-99-6
Ethylene glycol phenyl ether	339																		
Ethylene glycol phenyl ether/Diethylene glycol phenyl ether, mixture	1740																		
		NI	NI	1	R	1	NI	1	0	(2)	NI	(2)	(2)	(2)		1	SD	2	
Ethylene glycol phenyl ether/Diethylene glycol phenyl ether mixture	340																		
Ethylene glycol (>75%)/Sodium alkyl carboxylates/borax mixture	2477																		
		NI	(1)	(1)	R	1	NI	1	(1)	(2)	NI	(2)	(1)	(1)	R	1	D	3	
Ethylene glycol (>75%)/Sodium alkyl carboxylates/borax mixture	4006																		
Ethylene glycol (>85%)/Sodium alkyl carboxylates mixture	2475																		
		NI	(1)	(1)	R	1	NI	1	(1)	(1)	NI	(1)	0	0		1	D	1	
Ethylene glycol (>85%)/Sodium alkyl carboxylates mixture	4005																		
Ethylene oxide	77																		
		NI	NI	NI	NI	NI	NI	1	(1)	3	NI	3	3	3	CMR	4	GD	3	75-21-8
Ethylene oxide	2744																		
Ethylene-propylene copolymer	1508																		
		NI	NI	NI	NI	NI	NI	(0)	(0)	(0)	NI	(0)	(0)	(0)		1	NI	0	
Propylene-Butylene copolymer	633																		
Ethylene vinyl acetate copolymer (emulsion)	779																		
		0	1	1	NR	0	0	0	(0)	(2)	NI	(2)	2	0		0	S	2	
Ethylene-vinyl acetate copolymer (emulsion)	342																		
Ethyl 3-ethoxypropionate	1439																		
		1	NI	1	NR	2	NI	0	0	0	NI	0	1	1		3	FD	1	763-69-9
Ethyl-3-ethoxypropionate	321																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
2-Ethylhexanoic acid	776																		
		2	NI	2	R	2	NI	0	0	(2)	NI	(2)	2	2		1	FD	3	149-57-5
2-Ethylhexanoic acid	45																		
2-Ethylhexyl acrylate	782																		
		3	NI	3	R	2	NI	0	0	(2)	NI	(2)	2	2	Ss	2	F	3	103-11-7
2-Ethylhexyl acrylate	46																		
2-Ethylhexyl esters of fatty acids	2221																		
		0	NI	0	R	1	NI	0	(0)	(0)	NI	(0)	1	0		1	F	1	
	2578																		
2-Ethyl-2-(hydroxymethyl)propane-1,3-diol C8-C10 ester (LOA)	2054																		
		0	NI	0	R	0	NI	0	(0)	(0)	NI	(0)	0	(0)		1	Fp	2	
2-Ethyl-2-(hydroxymethyl) propane-1,3-diol (C8-C10) ester	42																		
5-Ethylidene-2-norbornene	783																		
		3	3	3	NR	3	0	0	0	2	NI	2	1	2		3	FE	2	16219-75-3
Ethylidene norbornene	345																		
Ethyl isoamyl ketone	737																		
		NI	NI	NI	NI	NI	NI	0	0	(1)	NI	(1)	1	(2)		3	FD	2	541-85-5
Ethyl isoamyl ketone	2618																		
Ethyl methacrylate	785																		
		1	NI	1	R	2	0	0	0	0	NI	0	(2)	(2)	Ss	4	FE	2	97-63-2
Ethyl methacrylate	318																		
N-Ethyl-2-methallylamine	2228																		
		0	NI	0	NR	2	NI	3	2	2	NI	2	3A	3		4	D	3	
N-Ethylmethylallylamine	2417																		
o-Ethyl phenol	788																		
		2	NI	2	NI	(2)	NI	1	NI	NI	NI	NI	NI	NI		2	S	NI	90-00-6
o-Ethylphenol	535																		
Ethyl propionate	790																		
		1	NI	1	NI	2	0	0	(1)	(2)	NI	(2)	2	2		4	ED	2	105-37-3
Ethyl propionate	319																		
2-Ethyl-3-propylacrolein	791																		
		2	NI	2	R	3	NI	0	0	1	NI	1	3	3		2	F	3	645-62-5
2-Ethyl-3-propylacrolein	43																		
Ethyl toluene (all isomers)	2297																		
		3	NI	3	NI	(3)	NI	0	0	0	NI	0	2	2		3	F	2	
Ethyl toluene	346																		
Fast Pyrolysis Bio-oil	2545																		
		(4)	NI	(4)	NR	2	0	0	(0)	(3)	NI	(3)	3A	(3)	ASs	1	Fp	3	1207435-39-9
Fast pyrolysis bio-oil	4285																		
Fatty acid methyl esters	2362																		
		0	NI	0	R	2	NI	0	(0)	(2)	NI	(2)	2	2		3	Fp	2	
Fatty acid methyl esters (m)	3125																		
Fatty acids, essentially linear, C6-C18, 2-ethylhexyl ester	2253																		
		0	NI	0	R	1	NI	0	0	(1)	NI	(1)	1	0		1	Fp	2	
Fatty acids, essentially linear (C6-C18) 2-ethylhexyl ester	1914																		
Fatty acids, essentially linear, C6-C18, 2-ethylhexyl ester	2253																		
		0	NI	0	R	1	NI	0	0	(1)	NI	(1)	1	0		1	Fp	2	
Fatty acid (C8-C16) ethyl hexyl esters	2759																		
Fatty acids, linear, C8-C18 saturated with C18 unsaturated	2260																		
		(4)	NI	(4)	R	(4)	(1)	(0)	(0)	(1)	NI	(1)	(1)	(1)		1	Fp	2	
Fatty acids, (C8-C18)	2779																		
Fatty acids, linear C12+ saturated with C12+ unsaturated	2261																		
		5	0	0	(R)	0	NI	(0)	(0)	(1)	NI	(1)	(1)	(1)		NI	Fp	2	
Fatty acids, (C12+)	2780																		
Fatty acids saturated, C8-C10	2324																		
		0	NI	0	R	4	NI	0	0	(3)	NI	(3)	3C	3		1	Fp	3	
Fatty acids, (C8-C10)	3079																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Fatty acids, unsaturated, linear, C16+	2259																		
		0	0	0	R	(0)	NI	0	0	(0)	NI	(0)	0	0		1	Fp	2	
Fatty acids, (C16+)	2778																		
Fatty acids, C18 unsaturated, reaction products with triethanolamine, dimethyl sulphate-quaternized	2548																		
		(0)	NI	(0)	R	(2)	(0)	0	0	(2)	NI	(2)	0	2		2	S	2	1226892-43-8
	4289																		
Fatty alcohols, linear, (C12+)	2326																		
		(5)	(2)	(2)	(R)	(4)	(1)	0	0	(1)	NI	(1)	1	1		1	Fp	2	
Alcohols (C12+), primary, linear	3081																		
Fatty alcohols, linear, (C16+)	2327																		
		(5)	(2)	(2)	(R)	(0)	(1)	0	0	(1)	NI	(1)	1	1		1	Fp	2	
Alcohols, linear (C16+)	3082																		
Ferric chloride	339																		
		Inorg	5	5	Inorg	2	0	1	(0)	(3)	NI	(3)	2	3		0	D	3	7705-08-0
Ferric chloride solutions	348																		
Ferric hydroxyethyl ethylene diamine triacetic acid, tri- sodium salt, solution	796																		
		NI	NI	NI	NI	NI	NI	0	0	(1)	NI	(1)	(0)	1		0	D	1	
Ferric hydroxyethylethylenediaminetriacetic acid, trisodium salt solution	349																		
Ferric nitrate/nitric acid solution	337																		
		Inorg	(5)	(5)	Inorg	(2)	(0)	0	(0)	(3)	NI	(3)	3	3		0	D	3	
Ferric nitrate/Nitric acid solution	350																		
Fish by-products (fresh)	2499																		
		NI	NI	(0)	NR	1	(0)	(0)	(0)	(0)	NI	(0)	(0)	(0)		0	FD	1	
Fish by-products (fresh) (*)	3893																		
Fish oil (containing less than 10% free fatty acids)	2316																		
		0	NI	0	R	2	NI	(0)	(0)	(1)	NI	(1)	(0)	(1)		1	Fp	2	
Fish oil	3046																		
Fish protein concentrate (containing 4% or less formic acid)	2502																		
		NI	NI	(0)	R	1	(0)	(0)	(0)	(0)	NI	(0)	(1)	(1)		0	D	1	
Fish protein concentrate (containing 4% or less formic acid)	4090																		
Fish silage (containing 3% or less formic acid with antioxidant)	2500																		
		NI	NI	(0)	R	0	(0)	(0)	(0)	(0)	NI	(0)	(1)	(1)		0	FD	1	
Fish silage (containing 3% or less formic acid with antioxidant)	3892																		
Fish silage protein concentrate (containing 4% or less formic acid)	2487																		
		NI	0	0	R	2	NI	(0)	(0)	(0)	NI	(0)	(1)	(1)		0	D	2	
Fish silage protein concentrate (containing 4% or less formic acid)	4062																		
Fish solubles	1509																		
		NI	NI	NI	NI	NI	NI	(0)	(0)	(0)	NI	(0)	(0)	(0)		0	NI	NI	
Fish solubles (water-based fish meal extract)	351																		
Fluorosilicic acid	806																		
		Inorg	0	0	Inorg	2	NI	2	(2)	4	NI	4	3	3		0	D	3	16961-83-4
Fluorosilicic acid	2716																		
Fluorosilicic acid solution (20-30%)	2240																		
		Inorg	2	2	Inorg	2	0	(1)	(1)	(3)	NI	(3)	3B	3	T	0	D	3	
Fluorosilicic acid solution (20-30%)	353																		
Formaldehyde (37%-50% solution)	807																		
		0	NI	0	R	2	NI	2	2	3	NI	3	3	3	CMSs	3	D	3	50-00-0
Formaldehyde solutions (45% or less)	354																		
Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol, methyloxirane and oxirane (60% in naphtha)	2560																		
		(5)	(5)	(5)	NR	1	0	0	0	(0)	NI	(0)	0	0		3	Fp	2	30704-64-4
	4318																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Formaldehyde, polymer with isobutylenated phenol	2377																		
		NI	NI	NI	NR	NI	NI	NI	NI	NI	NI	NI	NI	NI		1	Fp	NI	
Formaldehyde, polymer with isobutylenated phenol	1203																		
Formamide	808																		
		0	NI	0	NR	1	NI	0	0	1	NI	1	1	2	R	1	D	3	75-12-7
Formamide	355																		
Formic acid	809																		
		0	NI	0	R	2	NI	1	(1)	2	NI	2	3C	3		2	D	3	64-18-6
Formic acid (85% or less acid)	356																		
Formic acid	809																		
		0	NI	0	R	2	NI	1	(1)	2	NI	2	3C	3		2	D	3	64-18-6
Formic acid (over 85%)	3830																		
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)	NI	(2)	(2)	(3)		2	D	3	
Formic acid mixture (containing up to 18% propionic acid and up to 25% sodium formate)	3684																		
Fumaric adduct of rosin (water dispersion)	810																		
		3	NI	3	NR	3	NI	0	(0)	(3)	NI	(3)	0	3	Ss	0	D	3	65997-04-8
Fumaric adduct of rosin, water dispersion	357																		
Furfural	812																		
		0	NI	0	R	2	1	2	(2)	3	NI	3	2	2	C	3	D	3	98-01-1
Furfural	358																		
Furfuryl alcohol	813																		
		0	NI	0	R	1	NI	2	2	3	NI	3	2	2		2	D	2	98-00-0
Furfuryl alcohol	359																		
Glucitol/glycerol blend propoxylated (containing 10% or more amines)	2441																		
		2	NI	2	NR	1	1	1	0	(2)	NI	(2)	(1)	(1)		1	D	2	
Glucitol/glycerol blend propoxylated (containing 10% or more amines)	3919																		
Glucitol/glycerol blend, propoxylated (containing less than 10% amines)	2368																		
		0	NI	0	NR	1	NI	1	0	(2)	NI	(2)	(1)	(1)		1	SD	2	
Glucitol/glycerol blend propoxylated (containing less than 10% amines)	3074																		
Glycerine	814																		
		0	NI	0	R	0	0	0	0	(1)	NI	(1)	0	1		1	D	1	56-81-5
Glycerine	363																		
Glycerine (83%)/ Dioxane-dimethanol (17%) mixture	1743																		
		NI	NI	NI	R	1	NI	0	(0)	(1)	NI	(1)	(0)	1		1	D	1	
Glycerine (83%), Dioxanedimethanol (17%) mixture	364																		
Glycerol ethoxylated	2360																		
		0	NI	0	R	0	NI	0	0	(0)	NI	(0)	0	0		1	D	0	
Glycerol ethoxylated	3123																		
Glycerol monooleate	1898																		
		0	0	0	R	0	NI	0	(0)	(1)	NI	(1)	1	1		1	Fp	2	25496-72-4
Glycerol monooleate	365																		
Glycerol propoxylated	2346																		
		0	NI	0	NR	1	NI	1	0	(2)	NI	(2)	1	0		1	D	2	
Glycerol propoxylated	3110																		
Glycerol, propoxylated and ethoxylated	2276																		
		0	NI	0	NR	1	0	0	0	0	NI	0	0	0		1	SD	2	
Glycerol, propoxylated and ethoxylated	2872																		
Glycerol/sorbitol blend, propoxylated and ethoxylated	2372																		
		0	NI	0	NR	2	(0)	(0)	(0)	(0)	NI	(0)	(0)	(0)		NI	S	0	
	3136																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Glycerol/sucrose blend, propoxylated and ethoxylated	2361																		
		0	NI	0	NR	1	NI	0	0	0	NI	0	0	0		1	SD	0	
Glycerol/sucrose blend propoxylated and ethoxylated	3124																		
Glyceryl triacetate	816																		
		0	NI	0	R	1	0	1	0	0	NI	0	0	1		1	D	1	102-76-1
Glyceryl triacetate	367																		
Glycidyl ester of C10 trialkyl acetic acid	441																		
		3	NI	3	NR	3	NI	0	0	(2)	NI	(2)	2	1		1	F	2	
Glycidyl ester of C10 trialkylacetic acid	368																		
Glycine, Sodium salt, solution	817																		
		0	NI	0	NI	0	NI	0	(0)	(1)	NI	(1)	(0)	(1)		0	D	1	56-40-6
Glycine, sodium salt solution	369																		
Glycolic acid	2218																		
		0	0	0	R	1	NI	1	(1)	2	NI	2	3C	3		0	D	3	
Glycolic acid solution (70% or less)	2539																		
Glyoxal solutions (40% or less)	84																		
		0	NI	0	R	1	NI	0	0	2	NI	2	2	3	MSsSr	1	D	3	107-22-2
Glyoxal solution (40% or less)	370																		
Glyoxylic acid	1535																		
		0	NI	0	R	2	0	0	0	(3)	NI	(3)	0	3	Ss	1	D	3	298-12-4
Glyoxylic acid solution (50 % or less)	371																		
Glyphosate solution, without surfactant	1765																		
		0	0	0	NR	3	0	0	0	(3)	NI	(3)	0	3		1	D	3	1071-83-6
Glyphosate solution (not containing surfactant)	2204																		
Grape Seed Oil	2442																		
		(0)	NI	(0)	(R)	(0)	(0)	(0)	(0)	(1)	NI	(1)	(0)	(1)		1	Fp	2	8024-22-4
Grape Seed Oil	3643																		
Groundnut oil	820																		
		0	NI	0	R	(2)	NI	(0)	(0)	(0)	NI	(0)	(0)	0		1	Fp	2	8002-03-7
Groundnut oil	2769																		
Heptane	827																		
		4	NI	4	R	4	NI	0	0	0	NI	0	(1)	1	A	4	E	2	142-82-5
Heptane (all isomers)	372																		
Heptanoic acid	831																		
		2	NI	2	R	1	NI	0	0	1	NI	1	3B	(3)		1	FD	3	111-14-8
n-Heptanoic acid	479																		
Heptanol (all isomers)	2223																		
		2	NI	2	R	(2)	NI	0	0	(2)	NI	(2)	(1)	(2)		3	FD	2	
Heptanol (all isomers) (d)	373																		
1-Heptanol	828																		
		2	NI	2	R	2	0	1	0	2	NI	2	(2)	(2)		2	FD	2	111-70-6
1-Heptanol	2688																		
Heptene (all isomers)	2225																		
		3	NI	3	NI	2	NI	(0)	(0)	(0)	NI	(0)	(2)	(1)		4	E	2	
Heptene (all isomers)	374																		
1-Heptene	832																		
		3	NI	3	NI	2	NI	(0)	(0)	(0)	NI	(0)	(2)	(1)		4	E	2	
1-Heptene	2685																		
Heptyl acetate	833																		
		3	NI	3	(R)	(3)	NI	0	0	(2)	NI	(2)	1	2		2	F	2	112-06-1
Heptyl acetate	375																		
Hexadecyl naphthalene/dihexadecyl naphthalene mixture	2159																		
		0	NI	0	NR	0	NI	0	0	(1)	NI	(1)	1	1		1	Fp	2	
1-Hexadecylnaphthalene / 1,4-bis(hexadecyl)naphthalene mixture	2373																		
Hexahydro-1,3,5-trimethyl-1,3,5-triazine solution (45% or less)	2489																		
		(2)	NI	(2)	R	3	NI	1	(1)	(3)	NI	(3)	3A	3	Ss	2	D	3	108-74-7
Hexahydro-1,3,5-trimethyl-1,3,5-triazine solution (45% or less)	4123																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Hexamethylene diamine	845																		
		0	NI	0	R	2	NI	1	1	(3)	NI	(3)	3A	3	R	2	D	3	124-09-4
Hexamethylenediamine	377																		
Hexamethylene diamine	845																		
		0	NI	0	R	2	NI	1	1	(3)	NI	(3)	3A	3	R	2	D	3	124-09-4
Hexamethylenediamine (molten)	378																		
Hexamethylene diamine	845																		
		0	NI	0	R	2	NI	1	1	(3)	NI	(3)	3A	3	R	2	D	3	124-09-4
Hexamethylenediamine solution	380																		
Hexamethylene diamine adipate, 50% in water	846																		
		0	NI	0	R	1	NI	0	(0)	(0)	NI	(0)	0	0		0	D	0	3323-53-3
Hexamethylenediamine adipate (50% in water)	379																		
Hexamethylene diisocyanate	2142																		
		3	0	0	NR	2	NI	1	2	4	NI	4	3	3	SsSr	1	S	3	822-06-0
Hexamethylene diisocyanate	18																		
Hexamethylene glycol	847																		
		0	NI	0	R	1	NI	0	0	(1)	NI	(1)	0	1		1	D	1	629-11-8
Hexamethylene glycol	376																		
Hexamethyleneimine	848																		
		1	NI	1	NI	2	NI	3	1	2	NI	2	2	2		4	FED	2	111-49-9
Hexamethyleneimine	381																		
Hexamethylene tetramine (40% solution)	849																		
		0	NI	0	R	0	NI	0	0	(1)	NI	(1)	0	1	Ss	1	D	2	100-97-0
Hexamethylenetetramine solutions	382																		
Hexane	850																		
		3	NI	3	R	4	NI	0	0	0	NI	0	2	2	NA	4	E	2	100-54-3
Hexane (all isomers)	383																		
Hexane	850																		
		3	NI	3	R	4	NI	0	0	0	NI	0	2	2	NA	4	E	2	100-54-3
Hexane	2683																		
1,6-Hexanediol, distillation overheads	2143																		
		4	NI	4	NR	2	NI	0	0	2	NI	2	1	2		2	FED	2	
1,6-Hexanediol, distillation overheads	2641																		
Hexanoic acid	853																		
		2	NI	2	R	2	NI	0	0	(3)	NI	(3)	(3)	3		1	FD	3	142-62-1
Hexanoic acid	384																		
1-Hexanol	854																		
		1	0	0	(R)	2	NI	1	0	(3)	NI	(3)	1	3		2	FD	3	111-27-3
Hexanol	385																		
Hexene (all isomers)	2224																		
		3	NI	3	R	3	NI	(0)	(0)	(1)	NI	(1)	(1)	(1)		4	E	2	
Hexene (all isomers)	386																		
1-Hexene	855																		
		3	NI	3	R	3	NI	0	0	0	NI	0	1	1		4	E	2	592-41-6
1-Hexene	2681																		
2-Hexene (mixed isomers)	856																		
		3	NI	3	R	3	NI	(0)	(0)	0	NI	0	(1)	(1)		4	E	2	
2-Hexene (mixed isomers)	2682																		
Hexyl acetate	857																		
		2	NI	2	NI	3	NI	0	0	(1)	NI	(1)	1	1		3	FE	2	142-92-7
Hexyl acetate	387																		
sec-Hexyl acetate	858																		
		2	NI	2	NI	3	NI	0	0	0	NI	0	1	(2)		3	FED	2	108-84-9
Methylamyl acetate	456																		
Hexylene glycol	859																		
		0	NI	0	R	0	0	0	0	(3)	NI	(3)	2	3		2	D	2	107-41-5
Hexylene glycol	388																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Hydrocarbon wax Hydrocarbon wax	2278 741	(5)	NI	(5)	NR	0	0	(0)	(0)	(0)	NI	(0)	(0)	(0)	CT	1	Fp	3	
Hydrochloric acid Hydrochloric acid (*)	864 389	Inorg	0	0	Inorg	1	NI	1	1	3	NI	3	3C	3		0	DE	3	7647-01-0
Hydrogenated Starch Hydrolysate Hydrogenated starch hydrolysate	2347 3077	0	NI	0	R	0	NI	0	0	(0)	NI	(0)	0	0		1	D	0	
Hydrogen peroxide, more than 60% Hydrogen peroxide solutions (over 60% but not over 70% by mass)	867 390	Inorg	0	0	Inorg	3	NI	1	0	2	NI	2	3	3		0	D	3	7722-84-1
Hydrogen peroxide, more than 60% Hydrogen peroxide, more than 60%	867 2689	Inorg	0	0	Inorg	3	NI	1	0	2	NI	2	3	3		0	D	3	7722-84-1
Hydrogen peroxide, more than 8% but not more than 60% Hydrogen peroxide solutions (over 8% but not over 60% by mass)	2231 391	Inorg	0	0	Inorg	3	NI	1	0	(2)	NI	(2)	3	3		0	D	3	
Hydrogen peroxide, more than 8% but not more than 60% Hydrogen peroxide, more than 8% but not more than 60%	2231 2690	Inorg	0	0	Inorg	3	NI	1	0	(2)	NI	(2)	3	3		0	D	3	
N-(2-Hydroxyethyl) ethylene diamine triacetic acid, trisodium salt (solution) N-(Hydroxyethyl)ethylenediaminetriacetic acid, trisodium salt solution	870 470	0	NI	0	NI	1	NI	0	0	(1)	NI	(1)	1	1	R	0	D	3	150-30-0
[[(2-hydroxyethyl)imino]dimethylene]bisphosphonic acid, sodium salt	2493 4127	0	NI	0	NR	1	NI	0	0	(0)	NI	(0)	0	1		0	D	1	22036-78-8
1-(2-Hydroxyethyl)-2-nor(tall oil alkyl)-2-imidazoline	2556 4314	5	NI	5	NR	5	2	0	0	(3)	NI	(3)	3	3		1	Fp	3	61791-39-7
2-Hydroxy-4-(methylthio) butanoic acid 2-Hydroxy-4-(methylthio)butanoic acid	871 49	1	NI	1	R	1	NI	0	0	(3)	NI	(3)	1	3		1	D	3	583-91-5
Icosa(oxypropane-2,3-diyl)s Icosa(oxypropane-2,3-diyl)s	2092 392	NI	NI	NI	NI	NI	NI	0	(0)	(2)	NI	(2)	2	(2)		1	Fp	2	
Illipe oil (containing less than 10% free fatty acids) Illipe oil	2304 3034	(0)	NI	(0)	(R)	(0)	NI	(0)	(0)	(0)	NI	(0)	(0)	(0)		1	Fp	2	
Imidazolium compounds, 1-benzyl-4,5-dihydro-1-(hydroxyethyl)-2-norcoco alkyl, chlorides	2505 4157	(0)	NI	(0)	NR	4	NI	NI	NI	NI	NI	NI	(2)	(3)		(4)	Fp	3	61791-52-4
Interesterified Mixed Vegetable Oils Interesterified vegetable oils	2355 3115	0	NI	0	R	(0)	NI	(0)	(0)	(1)	NI	(1)	(1)	(1)		1	Fp	2	
Isoalkanes (C16-C18) Isoalkanes (C16-C18)	2526 4235	0	NI	0	R	1	NI	(0)	(0)	(0)	NI	(0)	(0)	(0)	A	1	F	1	
Isobutanol Isobutyl alcohol	382 397	0	NI	0	R	1	0	0	0	1	NI	1	2	3		3	D	3	78-83-1

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Isobutyl formate	405																		
		1	NI	1	NI	1	NI	0	(0)	0	NI	0	(1)	(2)		4	E	2	542-55-2
Isobutyl formate	398																		
Isobutyl methacrylate	408																		
		2	NI	2	NR	1	NI	0	0	0	NI	0	2	2	Ss	3	FED	2	97-86-9
Isobutyl methacrylate	2673																		
Isobutyric acid	419																		
		0	NI	0	R	2	NI	2	2	(3)	NI	(3)	3	3		3	E	NI	79-31-2
Isobutyric acid	2459																		
Isodecanol	557																		
		3	2	2	R	3	NI	0	0	0	NI	0	2	1		2	Fp	2	25339-17-7
Decyl alcohol (all isomers)	219																		
Isononanol	1059																		
		3	NI	3	NR	3	1	0	0	(2)	NI	(2)	2	2		2	Fp	2	2430-22-0
Nonyl alcohol (all isomers)	510																		
Isononylaldehyde	2300																		
		3	NI	3	NR	(3)	NI	0	0	(2)	NI	(2)	2	1		3	F	2	
Isononylaldehyde	2754																		
Isooctaldehyde	1071																		
		2	NI	2	NI	3	NI	0	0	(1)	NI	(1)	1	1		3	F	1	63885-09-6
Octyl aldehydes	542																		
Isooctanol	1076																		
		3	NI	3	R	2	0	1	0	(2)	NI	(2)	2	(2)		2	F	2	26952-21-6
iso-Octanol	2675																		
Isooctylamine	1081																		
		2	NI	2	NI	3	NI	1	1	3	NI	3	3	3		3	FD	3	104-75-6
2-Ethylhexylamine	48																		
Isopentene	1113																		
		2	NI	2	NI	2	NI	(0)	(0)	(0)	NI	(0)	(0)	(1)		4	E	2	563-45-1
iso-Pentene	2677																		
Isophorone	879																		
		1	1	1	R	2	0	1	1	(2)	NI	(2)	1	2		2	FD	2	78-59-1
Isophorone	399																		
Isophorone diamine	880																		
		0	0	0	NR	2	0	1	(1)	(3)	NI	(3)	3	3	Ss	1	D	3	2855-13-2
Isophoronediamine	401																		
Isophorone diisocyanate	881																		
		1	NI	1	NR	3	NI	0	0	3	NI	3	3	3	SsSr	1	S	3	4098-71-9
Isophorone diisocyanate	400																		
Isoprene	882																		
		2	2	2	NR	3	1	0	0	0	NI	0	1	2	CM	4	E	3	78-79-5
Isoprene	402																		
Isopropanol	1181																		
		0	NI	0	R	0	0	0	0	0	NI	0	1	2		4	D	2	67-63-0
Isopropyl alcohol	405																		
Isopropanolamine	1182																		
		0	NI	0	R	2	NI	0	1	0	NI	0	3	3		2	D	3	78-96-6
Isopropanolamine	403																		
Isopropyl acetate	1192																		
		1	NI	1	R	1	NI	0	0	0	NI	0	1	2		4	ED	2	108-21-4
Isopropyl acetate	404																		
Isopropylamine	1195																		
		0	NI	0	R	2	NI	2	2	1	NI	1	3	3		4	DE	3	75-31-0
Isopropylamine	407																		
Isopropylamine (70%)	2350																		
		0	NI	0	R	2	NI	2	2	1	NI	1	3	3		4	DE	3	
Isopropylamine (70% or less) solution	395																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Isopropyl benzene	1197																		
		3	2	2	R	3	NI	0	0	0	NI	0	2	1		3	FE	2	98-82-8
Propylbenzene (all isomers)	623																		
Isopropyl benzene	1197																		
		3	2	2	R	3	NI	0	0	0	NI	0	2	1		3	FE	2	98-82-8
Isopropylbenzene	2687																		
Isopropyl cyclohexane	1199																		
		4	NI	4	(NR)	(3)	NI	(0)	(0)	(1)	NI	(1)	(0)	(1)		3	FE	2	696-29-7
Isopropylcyclohexane	408																		
Isopropyltoluenes	549																		
		4	4	4	(NR)	3	NI	0	(0)	1	NI	1	2	(1)		3	FE	2	99-87-6
p-Cymene	552																		
Isovaleraldehyde	1390																		
		1	NI	1	R	3	NI	0	0	0	NI	0	2	2		4	D	2	590-86-3
Valeraldehyde (all isomers)	731																		
Jatropha oil	2402																		
		0	NI	(0)	(R)	(2)	NI	(0)	(0)	(0)	NI	(0)	(0)	(0)		1	Fp	2	
Jatropha oil	3637																		
Kaolin slurry	883																		
		Inorg	NI	0	Inorg	0	NI	0	0	0	NI	0	0	0		0	S	0	1332-58-7
Kaolin slurry	409																		
Lactic acid	886																		
		0	NI	0	R	1	NI	0	0	(3)	NI	(3)	2	3		1	D	3	50-21-5
Lactic acid	410																		
Lactonitrile solution (80% or less)	887																		
		0	NI	0	R	4	NI	3	4	(4)	NI	(4)	NI	NI		2	D	3	78-97-7
Lactonitrile solution (80% or less)	411																		
Lard (containing less than 10% free fatty acids)	2317																		
		0	NI	0	R	0	NI	0	(0)	(1)	NI	(1)	0	1		1	Fp	2	
Lard	3047																		
Latex, ammonia inhibited	889																		
		0	NI	0	NI	(2)	NI	0	0	(1)	NI	(1)	0	1		0	D	1	
Latex, ammonia (1% or less)- inhibited	413																		
Lauric acid	891																		
		4	NI	4	R	4	1	0	(0)	(2)	NI	(2)	1	2		1	Fp	2	143-07-7
Lauric acid	415																		
Lauroamidopropyl betaine solution	2479																		
		(4)	(2)	(2)	R	(4)	(1)	(0)	(0)	(3)	NI	(3)	(1)	(3)		0	D	3	4292-10-8
	4055																		
Lauryl methacrylate	893																		
		0	2	2	R	0	0	0	(0)	(1)	NI	(1)	1	1		1	F	1	142-90-5
Dodecyl methacrylate	300																		
Lecithin (soybeans)	2146																		
		0	NI	0	R	0	NI	0	0	(0)	NI	(0)	0	(0)		1	SD	0	
Lecithin	417																		
Lignin sulphonic acid, salt solution	34																		
		0	NI	0	(NR)	(0)	NI	0	(0)	(0)	NI	(0)	(0)	(0)		0	D	0	
Ligninsulphonic acid, sodium salt solution	419																		
Linear alkyl (C12-16) propoxyamine ethoxylate	2380																		
		3	0	3	NR	4	NI	1	(1)	(3)	NI	(3)	3	(3)		1	D	3	
Alkyl(C12-C16) propoxyamine ethoxylate	3423																		
Linseed oil (containing less than 4% free fatty acids)	2318																		
		0	NI	0	R	(2)	NI	0	(0)	(1)	NI	(1)	0	(1)		1	Fp	2	
Linseed oil	3048																		
Long chain alkaryl polyether (C11-C20) (LOA)	1982																		
		(4)	NI	(4)	NR	3	(1)	0	0	(2)	NI	(2)	0	2		1	Fp	2	
Long-chain alkaryl polyether (C11-C20)	421																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Long chain alkaryl sulphonic acid (C16-C60) (LOA)	1966																		
		0	NI	0	(NR)	0	NI	0	0	(2)	NI	(2)	(1)	2		2	Fp	2	
Long-chain alkaryl sulphonic acid (C16-C60)	424																		
Long-chain alkylphenate/Phenol sulphide mixture	1754																		
		(0)	NI	(0)	(NR)	0	NI	0	0	(2)	NI	(2)	2	2		1	Fp	2	
Long-chain alkylphenate/Phenol sulphide mixture	425																		
Long chain alkylphenol (C14-C18)	2478																		
		(0)	NI	(0)	NR	(0)	(0)	(0)	(0)	(2)	NI	(2)	(2)	(0)		1	Fp	2	
Long-chain alkylphenol (C14-C18)	4029																		
Long chain alkylphenol (C18-C30)	2476																		
		(0)	NI	(0)	(NR)	(1)	(0)	(0)	(0)	(2)	NI	(2)	(2)	(0)		1	Fp	2	
Long-chain alkylphenol (C18-C30)	4040																		
Long-chain polyetheramine in alkyl(C2-C4)benzenes	1457																		
		NI	NI	NI	NR	2	NI	0	0	(2)	NI	(2)	2	2		3	Fp	2	
	422																		
Lubrizol polyolefin anhydride	1865																		
		0	NI	0	NR	1	NI	0	0	(2)	NI	(2)	1	(2)		1	Fp	2	
Polyolefin anhydride	605																		
L-Lysine solution (50% or less)	2199																		
		0	0	0	R	1	0	0	0	0	NI	0	1	NI		1	D	1	
L-Lysine solution (60% or less)	2306																		
Magnesium alkyl (long chain) salicylate (overbased) in mineral oil (LOA)	71																		
		(0)	NI	(0)	NR	(2)	NI	0	0	(1)	NI	(1)	(1)	(1)	Ss	1	S	2	
Magnesium long-chain alkyl salicylate (C11+)	429																		
Magnesium chloride	915																		
		Inorg	0	0	Inorg	1	0	0	0	(0)	NI	(0)	0	0		0	D	0	7786-30-3
Magnesium chloride solution	427																		
Magnesium hydroxide slurry	916																		
		Inorg	0	0	Inorg	0	NI	0	0	(1)	NI	(1)	(0)	1		0	S	1	1309-42-8
Magnesium hydroxide slurry	428																		
Magnesium lignosulphonate solutions	2356																		
		(0)	NI	(0)	(NR)	(0)	NI	0	0	(0)	NI	(0)	(0)	(0)		1	D	0	
Ligninsulphonic acid, magnesium salt solution	3116																		
Magnesium long chain alkaryl sulphonate (C11-C50) (LOA)	1967																		
		0	NI	0	NR	0	NI	0	0	(2)	NI	(2)	1	2		1	Fp	2	
Magnesium long-chain alkaryl sulphonate (C11-C50)	430																		
Maleic acid/Acrylic acid/Ethenylsulphonic acid/Ethenylphosphonic acid polymer, sodium salt in aqueous/ethylene glycol solution	2528																		
		0	NI	0	(NR)	0	0	(0)	(0)	(3)	NI	(3)	(2)	(3)	Ss	2	D	3	
	4237																		
Maleic acid/allyl sulphonic acid copolymer with phosphonate groups, partial sodium salt (aqueous solution)	2412																		
		0	NI	0	NR	0	NI	(0)	(0)	(0)	NI	(0)	(0)	(0)		2	D	0	
Maleic acid/allyl sulphonic acid copolymer with phosphonate groups, partial sodium salt (aqueous solution)	3688																		
Maleic anhydride	921																		
		1	NI	1	R	2	0	1	2	(3)	NI	(3)	3	3	SsSr	1	D	3	108-31-6
Maleic anhydride	431																		
Maleic anhydride - sodium allylsulphonate copolymer (aqueous solution)	2410																		
		0	NI	0	NR	1	NI	0	0	(0)	NI	(0)	(0)	0		1	D	0	
Maleic anhydride-sodium allylsulphonate copolymer solution	3686																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Maltitol Syrup	2348																		
		0	NI	0	R	0	NI	0	0	(0)	NI	(0)	0	0		1	D	0	
Maltitol solution	3078																		
Mango kernel oil (containing less than 10% free fatty acids)	2305																		
		(0)	NI	(0)	(R)	(0)	NI	(0)	(0)	(0)	NI	(0)	(0)	(0)		1	Fp	2	
Mango kernel oil	3035																		
2-Mercaptobenzothiazol	925																		
		2	1	1	NR	4	2	0	0	(0)	NI	(0)	0	0	Ss	0	S	2	149-30-4
Mercaptobenzothiazol, sodium salt solution	432																		
2-Mercaptoethanol	2495																		
		0	NI	0	NR	1	NI	2	2	2	NI	2	2	3	SsT	2	D	3	60-24-2
2-Mercaptoethanol	4129																		
Mesityl oxide	946																		
		1	NI	1	R	(1)	NI	1	0	2	NI	2	2	2		3	D	2	141-79-7
Mesityl oxide	433																		
Metam-sodium (ISO)	202																		
		0	NI	0	NR	4	NI	1	2	(2)	NI	(2)	2	1	Ss	0	D	2	137-42-8
Metam sodium solution	434																		
Methacrylic acid-alkoxypoly (alkylene oxide) methacrylate co-polymer sodium salt (45% or less solution)	2288																		
		NI	0	0	NR	1	NI	0	(0)	(1)	NI	(1)	1	0		0	D	1	
	2819																		
Methacrylic acid, inhibited	948																		
		0	NI	0	R	2	0	1	2	2	NI	2	3	3		2	D	3	79-41-4
Methacrylic acid	435																		
Methacrylic resin in 1,2 Dichloroethane soln.	2046																		
		1	1	1	NR	2	0	(1)	(0)	(2)	NI	(2)	(1)	(2)	C	4	SD	3	
Methacrylic resin in ethylene dichloride	436																		
Methacrylonitrile	949																		
		0	NI	0	R	2	0	2	2	3	NI	3	1	1	Ss	4	ED	3	126-98-7
Methacrylonitrile	437																		
Methanesulphonic acid	2561																		
		0	NI	0	R	0	0	1	1	(3)	NI	(3)	3	3		1	D	3	75-75-2
	4319																		
Methanol	951																		
		0	NI	0	R	0	0	(2)	(2)	(2)	NI	(2)	2	2	T	4	DE	3	67-56-1
Methyl alcohol (*)	441																		
(2-Methoxymethylethoxy)propanols	2452																		
		0	NI	0	R	0	(0)	0	0	(0)	NI	(0)	0	0		2	D	0	
	3870																		
Methyl acetate	954																		
		0	NI	0	R	1	NI	0	0	0	NI	0	1	2		4	DE	2	79-20-9
Methyl acetate	438																		
Methyl acetoacetate	335																		
		0	NI	0	R	1	NI	0	0	(2)	NI	(2)	1	2		2	D	2	105-45-3
Methyl acetoacetate	439																		
Methyl acrylate	955																		
		0	NI	0	R	3	NI	1	1	2	NI	2	2	3	MSs	4	D	3	96-33-3
Methyl acrylate	440																		
Methylamine solution 42% or less	957																		
		0	NI	0	R	2	NI	2	(2)	3	NI	3	3	3	M	4	DE	3	74-89-5
Methylamine solutions (42% or less)	455																		
Methyl amyl alcohol	958																		
		1	NI	1	R	1	NI	1	0	2	NI	2	1	3		3	FED	3	108-11-2
Methylamyl alcohol	457																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Methyl amyl ketone	959																		
		1	NI	1	NI	1	NI	1	0	0	NI	0	1	1		3	FED	2	110-43-0
Methyl amyl ketone	442																		
N-Methyl aniline	961																		
		1	NI	1	(NR)	3	1	1	1	(2)	NI	(2)	(1)	1		2	FD	2	100-61-8
N-Methylaniline	3107																		
alpha-Methylbenzyl alcohol with acetophenone (15% or less)	2399																		
		1	NI	1	(R)	(1)	NI	(1)	(0)	(3)	NI	(3)	(2)	(3)	R	1	Fp	3	98-85-1
alpha-Methylbenzyl alcohol with acetophenone (15% or less)	3634																		
2-Methyl-2-butanol	964																		
		1	1	1	(R)	(1)	0	1	1	1	NI	1	3	2		4	D	3	75-85-4
tert-Amyl alcohol	685																		
3-Methyl-1-butanol	965																		
		1	1	1	(R)	1	0	1	0	(2)	NI	(2)	2	2		3	FED	2	123-51-3
Amyl alcohol, primary	126																		
3-Methyl-1-butanol	965																		
		1	1	1	(R)	1	0	1	0	(2)	NI	(2)	2	2		3	FED	2	123-51-3
Isoamyl alcohol	396																		
Methyl butenol	967																		
		0	NI	0	R	2	NI	1	0	(2)	NI	(2)	2	2		3	D	2	556-82-1
Methylbutenol	458																		
Methyl tert-butyl ether	969																		
		1	NI	1	NR	1	0	0	0	0	NI	0	2	1		4	ED	2	1634-04-4
Methyl tert-butyl ether	454																		
Methyl butyl ketone	970																		
		1	NI	1	(R)	1	(0)	0	0	0	NI	0	1	1	RN	3	FED	3	591-78-6
Methyl butyl ketone	443																		
Methylbutynol	968																		
		0	NI	0	NR	1	NI	1	1	0	NI	0	0	2		3	D	2	115-19-5
2-Methyl-2-hydroxy-3-butyne	52																		
Methylbutynol	968																		
		0	NI	0	NR	1	NI	1	1	0	NI	0	0	2		3	D	2	115-19-5
Methylbutynol	459																		
Methyl butyrate	973																		
		1	NI	1	NI	(2)	NI	0	0	2	NI	2	2	(2)		4	ED	2	623-42-7
Methyl butyrate	444																		
Methyl cyclohexane	976																		
		3	3	3	NR	3	1	0	0	1	NI	1	1	1	A	4	E	2	108-87-2
Methylcyclohexane	460																		
Methyl cyclopentadiene, dimer	977																		
		4	NI	4	(NR)	(3)	NI	0	(0)	(2)	NI	(2)	(2)	(2)		3	F	2	26472-00-4
Methylcyclopentadiene dimer	461																		
Methyl cyclopentadienyl manganese tricarbonyl (60-70%) in mineral oil	2213																		
		3	NI	3	NR	4	NI	2	3	4	NI	4	1	1		2	S	3	
Methylcyclopentadienyl manganese tricarbonyl	2692																		
N-Methyldiethanolamine	1491																		
		0	NI	0	R	2	NI	1	0	(2)	NI	(2)	1	2		1	D	2	105-59-9
Methyl diethanolamine	445																		
N,N'-methylene-bis(5-methyloxazolidine)	2555																		
		0	NI	0	R	3	1	1	2	(3)	NI	(3)	3B	3	CMTSs	2	D	3	66204-44-2
N,N' methylene-bis(5-methyloxazolidine)	4296																		
Methylene dithiocyanate	2235																		
		2	NI	2	NR	5	NI	2	0	4	NI	4	3	3	Ss	NI	NI	3	6317-18-6
Methylene bisthiocyanate	2693																		
2-Methyl-6-ethylaniline	984																		
		2	NI	2	NR	2	NI	1	1	(2)	NI	(2)	0	2		1	FD	2	24549-06-2
2-Methyl-6-ethyl aniline	54																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
2-Methyl-5-ethylpyridine	986																		
		2	NI	2	R	2	0	1	2	(3)	NI	(3)	3	3		2	FD	3	104-90-5
2-Methyl-5-ethyl pyridine	53																		
Methyl formate	987																		
		0	NI	0	R	1	NI	1	0	2	NI	2	0	2		4	DE	2	107-31-3
Methyl formate	447																		
N-Methylglucamine, 60% aqueous solution	2048																		
		0	NI	0	R	0	NI	1	0	(3)	NI	(3)	0	3		1	D	3	6284-40-8
N-Methylglucamine solution (70% or less)	482																		
2-Methylglutaronitrile with 2-Ethylsuccinonitrile (12% or less)	2397																		
		0	NI	0	R	0	NI	2	2	3	NI	3	0	1		1	FD	2	4553-62-2
2-Methylglutaronitrile with 2-Ethylsuccinonitrile (12% or less)	3632																		
Methyl heptyl ketone	988																		
		3	NI	3	R	3	NI	0	0	NI	NI	NI	NI	NI		2	FED	NI	821-55-6
Methyl heptyl ketone	448																		
Methyl isobutyl ketone	971																		
		1	NI	1	R	1	0	1	0	2	NI	2	2	3		4	FED	3	108-10-1
Methyl isobutyl ketone	449																		
Methyl methacrylate	995																		
		1	NI	1	R	2	NI	0	0	0	NI	0	2	2	Ss	4	ED	2	80-62-6
Methyl methacrylate	450																		
3-Methyl-3-methoxy butanol	996																		
		1	NI	1	NR	0	NI	0	(0)	(2)	NI	(2)	1	(2)		2	FD	2	
3-Methyl-3-methoxybutanol	59																		
3-Methyl-3-methoxybutyl acetate	997																		
		1	NI	1	NR	0	NI	0	(0)	NI	NI	NI	NI	NI		2	F	NI	
3-Methyl-3-methoxybutyl acetate	60																		
Methyl naphthalenes	1999																		
		4	NI	4	(NR)	(4)	NI	1	0	(2)	NI	(2)	1	1		1	F	2	
Methyl naphthalene (molten)	451																		
2-Methyl pentane	1000																		
		3	NI	3	NI	4	NI	(0)	(0)	(2)	NI	(2)	(2)	(2)		4	E	2	107-83-5
2-Methylpentane	2684																		
2-Methyl-1,3-propanediol	2200																		
		0	0	0	NR	0	0	0	0	(0)	NI	(0)	0	0		1	D	0	
2-Methyl-1,3-propanediol	2213																		
Methyl propyl ketone	1003																		
		0	NI	0	(R)	0	NI	1	0	(2)	NI	(2)	1	2		4	FED	2	107-87-9
Methyl propyl ketone	452																		
2-Methyl pyridine	1005																		
		1	NI	1	R	1	NI	1	2	1	NI	1	3A	3		3	D	3	109-06-8
2-Methylpyridine	55																		
3-Methylpyridine	1006																		
		1	NI	1	R	1	NI	1	2	2	NI	2	3	3		3	D	3	108-99-6
3-Methylpyridine	61																		
4-Methylpyridine	1007																		
		1	NI	1	(R)	1	NI	1	2	2	NI	2	3	3		3	D	3	108-89-4
4-Methylpyridine	63																		
N-Methylpyrrolidone	1008																		
		0	NI	0	R	1	NI	0	0	2	NI	2	1	2	R	1	D	3	872-50-4
N-Methyl-2-pyrrolidone	481																		
Methyl salicylate	86																		
		2	NI	2	R	2	NI	1	1	(2)	NI	(2)	2	1	R	1	SD	3	119-36-8
Methyl salicylate	453																		
alpha-Methylstyrene	1010																		
		3	3	3	NR	3	NI	0	0	1	NI	1	2	1	M	3	FE	3	98-83-9
alpha-Methylstyrene	107																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
3-(Methylthio) propionaldehyde	993																		
		0	NI	0	R	3	1	1	1	2	NI	2	2	3	NSs	3	D	3	3268-49-3
3-(methylthio)propionaldehyde	2368																		
Metolachlor (ISO)	113																		
		2	2	2	NR	5	1	1	0	(2)	NI	(2)	1	0	Ss	1	S	2	51218-45-2
N-(2-Methoxy-1-methyl ethyl)-2-ethyl-6-methyl chloroacetanilide	469																		
Mixed acid oil	2306																		
		(0)	NI	(0)	(R)	(0)	NI	0	(0)	(1)	NI	(1)	(1)	1		1	Fp	2	
Acid oil mixture from soyabean, corn (maize) and sunflower oil refining	3036																		
Mixture of dithiophosphate salts in water	2381																		
		1	0	1	NR	2	NI	0	0	(2)	NI	(2)	2	2		1	D	2	
Dialkyl thiophosphates sodium salts solution	3424																		
Molasses	1013																		
		0	NI	0	R	0	NI	0	0	0	NI	0	0	0		2	D	0	
Molasses	462																		
Molybdenum polysulphide long chain alkyl dithiocarbamide complex	2344																		
		4	2	2	NR	2	0	0	0	(2)	NI	(2)	2	2		1	Fp	2	
Molybdenum polysulphide long chain alkyl dithiocarbamide complex	3108																		
Mononitrobenzene	1017																		
		1	1	1	R	3	(4)	(2)	2	2	NI	2	1	1	CRT	2	SD	3	98-95-3
Nitrobenzene	501																		
Morpholine	1018																		
		0	0	0	R	2	NI	1	2	2	NI	2	3	3		3	D	3	110-91-8
Morpholine	463																		
Myrcene	1019																		
		4	NI	4	R	4	1	0	0	(2)	NI	(2)	2	NI		3	F	2	123-35-3
Myrcene	465																		
Naphthalene (molten)	1																		
		3	3	3	NR	4	1	1	(0)	(1)	NI	(1)	0	0	T	2	S	2	91-20-3
Naphthalene (molten)	493																		
Naphthalene, crude (molten) (!)	2459																		
		NI	(3)	(3)	NR	3	0	0	(0)	(2)	NI	(2)	2	2	CMT	2	Fp	3	85117-10-8
Naphthalene crude (molten)	3858																		
Naphthalene sulphonic acid condensed with formaldehyde, sodium salt, solution	1020																		
		0	1	1	(NR)	1	NI	0	(0)	(1)	NI	(1)	0	1		0	D	1	9084-06-4
	494																		
Neodecanoic acid	1025																		
		4	NI	4	NR	2	NI	0	0	(2)	NI	(2)	0	2		1	Fp	2	26896-20-8
Neodecanoic acid	496																		
Nitric acid (90% or less)	1029																		
		Inorg	NI	0	Inorg	2	NI	(3)	(1)	3	NI	3	3C	3		0	D	3	7697-37-2
Nitric acid (70% and over)	498																		
Nitric acid (90% or less)	1029																		
		Inorg	NI	0	Inorg	2	NI	(3)	(1)	3	NI	3	3C	3		0	D	3	7697-37-2
Nitric acid (less than 70%)	499																		
Nitrilotriacetic acid,trisodium salt	1030																		
		0	NI	0	R	1	0	1	(0)	0	NI	0	1	1	CMR	0	D	3	5094-31-3
Nitrilotriacetic acid, trisodium salt solution	500																		
Nitroethane	1037																		
		0	NI	0	NR	2	NI	1	0	(2)	NI	(2)	(0)	(1)		3	SD	2	79-24-3
Nitroethane	502																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Nitroethane (80%)/Nitropropane (20%)	2245																		
		0	1	1	NR	2	NI	1	1	2	NI	2	0	1		3	E	2	
Nitroethane(80%)/ Nitropropane(20%)	503																		
Nitroethane, 1-Nitropropane (each 15% or more) mixture	2270																		
		(0)	(1)	(1)	(NR)	(2)	NI	1	1	2	NI	2	0	1		3	FED	2	
Nitroethane, 1-Nitropropane (each 15% or more) mixture	2212																		
2-Nitrophenol	1041																		
		1	2	2	R	3	(2)	0	0	(1)	NI	(1)	1	1		3	S	1	88-75-5
o-Nitrophenol (molten)	536																		
1-Nitropropane	1044																		
		0	1	1	NR	1	NI	1	0	2	NI	2	0	1		3	FED	2	108-03-2
1-Nitropropane	2747																		
1- or 2- Nitropropane	2242																		
		0	1	1	NR	1	NI	2	0	2	NI	2	0	1	C	3	FED	3	
1- or 2-Nitropropane	20																		
2-Nitropropane	1045																		
		0	1	1	NR	2	NI	2	0	2	NI	2	0	0	C	3	FED	3	79-46-9
2-Nitropropane	2748																		
Nitropropane (60%) Nitroethane (40%) (mixture)	1046																		
		0	1	1	NR	2	NI	1	0	2	NI	2	0	1	C	3	FED	3	
Nitropropane (60%)/Nitroethane (40%) mixture	504																		
o-Nitrotoluene	1049																		
		2	2	2	NR	2	(1)	1	0	(2)	NI	(2)	0	1	CMR	1	S	3	88-72-2
o-Nitrotoluene	2745																		
p-Nitrotoluene	1051																		
		2	1	1	NR	3	0	1	0	(2)	NI	(2)	0	1	R	1	S	3	99-99-0
p-Nitrotoluene	2746																		
o- or p-Nitrotoluenes	2241																		
		2	2	2	NR	3	(1)	1	0	(2)	NI	(2)	0	1	CMR	1	S	3	
o- or p-Nitrotoluenes	532																		
Nonane	1054																		
		4	NI	4	R	4	NI	0	0	1	NI	1	1	1	A	3	FE	2	111-84-2
Nonane (all isomers)	506																		
Nonanoic acid	1055																		
		3	NI	3	R	2	NI	0	0	(3)	NI	(3)	2	3		0	F	3	112-05-0
Nonanoic acid (all isomers)	507																		
Nonene (all isomers)	2222																		
		4	NI	4	NI	3	NI	0	0	0	NI	0	1	1	A	4	FE	2	
Nonene (all isomers)	508																		
1-Nonene	1060																		
		4	NI	4	NI	3	NI	0	0	0	NI	0	1	1	A	3	FE	2	27215-95-8
1-Nonene	2680																		
Nonyl acetate	1766																		
		4	NI	4	NI	NI	NI	0	0	NI	NI	NI	NI	NI		2	F	NI	143-13-5
Nonyl acetate	509																		
Nonyl methacrylate monomer	1061																		
		5	NI	5	R	3	NI	(0)	(0)	(1)	NI	(1)	(1)	(1)		2	F	1	2696-43-7
Nonyl methacrylate monomer	511																		
Nonyl phenol	1062																		
		5	4	4	NR	5	3	1	0	(3)	NI	(3)	3	3		1	Fp	3	25154-52-3
Nonylphenol	512																		
Nonyl(C6-C12)phenol poly(4-12)ethoxylate	1063																		
		4	NI	4	NR	3	1	0	0	(2)	NI	(2)	2	1		1	D	2	
Alkyl(C7-C11)phenol poly(4-12) ethoxylate	97																		
Nonyl(C6-C12)phenol poly(4-12)ethoxylate	1063																		
		4	NI	4	NR	3	1	0	0	(2)	NI	(2)	2	1		1	D	2	
Nonylphenol poly(4+)ethoxylate	513																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
9-Octadecen-1-amine, (Z)-	2559																		
		(4)	NI	(4)	R	4	2	1	(0)	(3)	NI	(3)	3	(3)		1	F	3	112-90-3
	4317																		
Octamethylcyclotetrasiloxane	2398																		
		5	5	5	NR	0	3	0	0	0	NI	0	0	0		3	F	1	
Octamethylcyclotetrasiloxane	3633																		
Octane	1072																		
		5	NI	5	(R)	4	NI	(0)	(0)	0	NI	0	0	0	A	4	FE	2	111-65-9
Octane (all isomers)	538																		
Octanoic acid (Caprylic acid)	1074																		
		3	NI	3	R	1	NI	0	0	(3)	NI	(3)	3	3		1	F	3	124-07-2
Octanoic acid (all isomers)	539																		
1-Octanol	1075																		
		3	NI	3	R	2	0	1	0	(2)	NI	(2)	2	2		2	Fp	2	111-87-5
Octanol (all isomers)	540																		
1-Octanol	1075																		
		3	NI	3	R	2	0	1	0	(2)	NI	(2)	2	2		2	Fp	2	111-87-5
1-Octanol	2676																		
Octene (all isomers)	1079																		
		4	NI	4	NR	3	NI	0	0	0	NI	0	2	1	A	4	FE	2	
Octene (all isomers)	541																		
Octyl acetate	1080																		
		3	NI	3	R	2	NI	0	0	(1)	NI	(1)	1	NI		2	FD	1	112-14-1
n-Octyl acetate	483																		
Octyl decyl adipate	1082																		
		0	NI	0	(R)	(0)	(0)	(0)	(0)	(1)	NI	(1)	(1)	(1)		1	Fp	2	110-29-2
Octyl decyl adipate	543																		
n-Octyl mercaptan	2461																		
		4	3	3	NR	5	NI	1	0	(1)	NI	(1)	1	0	Ss	2	F	3	
n-Octyl mercaptan	3742																		
Olefin/Alkyl ester copolymer (molecular weight 2000+) (LOA)	1965																		
		NI	NI	0	NR	0	NI	0	0	(0)	NI	(0)	0	0		2	Fp	2	
Olefin-Alkyl ester copolymer (molecular weight 2000+)	546																		
Olefin mixture (C7-C9)	2385																		
		5	4	4	NR	4	NI	(0)	0	0	NI	0	2	1	A	4	E	2	97593-00-5
Olefin mixture (C7-C9) C8 rich, stabilized	3548																		
Olefin mixtures (C5-C7)	2243																		
		3	NI	3	R	3	NI	(0)	(0)	(1)	NI	(1)	(2)	(1)		4	E	2	
Olefin mixtures (C5-C7)	545																		
Olefin mixtures (C5-C15)	2321																		
		(5)	NI	(5)	NR	(4)	NI	(0)	(0)	(2)	NI	(2)	(2)	(1)	A	4	FE	2	
Olefin mixtures (C5-C15)	544																		
Olefins C13 and above, all isomers	2028																		
		5	NI	5	NR	0	NI	0	0	(1)	NI	(1)	(1)	0	A	2	Fp	3	
Olefins (C13+, all isomers)	547																		
alpha-Olefins (C6-C18),mixture	2030																		
		(5)	NI	(5)	NR	(4)	NI	(0)	(0)	(2)	NI	(2)	(2)	(1)	A	4	FE	2	
alpha-Olefins (C6-C18) mixtures	108																		
alpha-Olefins (C12+), mixture	2516																		
		(5)	(5)	(5)	(R)	(0)	NI	(0)	(0)	(1)	(0)	(0)	(1)	(0)	A	(2)	Fp	3	
alpha-Olefins (C12+), mixture	4197																		
Oleic acid	1089																		
		0	NI	0	R	0	NI	0	1	(2)	NI	(2)	1	1		1	Fp	2	112-80-1
Oleic acid	548																		
Oleylamine	1862																		
		0	NI	0	NR	4	NI	1	(1)	(3)	NI	(3)	3B	3		1	Fp	3	
Oleylamine	550																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Olive oil Olive oil	1090 2771	0	NI	0	R	(2)	NI	(0)	(0)	(1)	NI	(1)	1	1		1	Fp	2	8001-25-0
Orange juice Orange juice	2375 3151	0	0	0	R	0	0	0	0	(0)	NI	(0)	0	0		0	D	0	
Orange juice (not concentrated) Orange juice (not concentrated)	2382 3425	0	0	0	R	0	0	0	0	(0)	NI	(0)	0	0		0	D	0	
Oxatetra-azahydroxyalkanoic acid, substituted with acetic acid / acetoxyethanolamine	2413 3689	1	NI	1	R	1	NI	0	0	0	NI	0	0	0		0	D	0	
Oxirane, methyl-, polymer with 1,3-diisocyanatomethylbenzene and oxirane (80% in naphtha)	2558 4316	(5)	(5)	(5)	NR	3	0	0	0	(0)	NI	(0)	0	0		2	Fp	2	9052-50-0
Oxygenated aliphatic hydrocarbon mixture Oxygenated aliphatic hydrocarbon mixture	2266 2825	5	2	(2)	NR	1	NI	0	0	(1)	NI	(1)	1	1		3	FE	2	
Palm acid oil Palm acid oil	2307 3037	(0)	NI	(0)	(R)	(0)	NI	0	(0)	(1)	NI	(1)	0	1		1	Fp	2	
Palm fatty acid distillate Palm fatty acid distillate	2310 3040	NI	NI	(0)	(R)	(0)	NI	0	(0)	(1)	NI	(1)	0	1		1	Fp	2	
Palm kernel fatty acid distillate Palm kernel fatty acid distillate	2335 3111	(0)	0	0	R	(3)	NI	0	(0)	(2)	NI	(2)	1	2		1	Fp	2	
Palm kernel olein (containing less than 5 % free fatty acids) Palm kernel olein	2308 3038	(0)	NI	(0)	(R)	1	NI	(0)	(0)	(0)	NI	(0)	(0)	(0)		1	Fp	2	
Palm kernel stearin (containing less than 5% free fatty acids) Palm kernel stearin	2309 3039	0	(0)	(0)	(R)	0	NI	(0)	(0)	(0)	NI	(0)	(0)	(0)		1	Fp	2	
Palm Mid Fraction Palm mid-fraction	2363 3126	(0)	NI	(0)	(R)	(0)	NI	0	0	(0)	NI	(0)	(0)	(0)		1	Fp	2	
Palm nut oil Palm kernel oil	1094 2766	0	NI	0	R	1	NI	(0)	(0)	(1)	NI	(1)	(0)	(1)		1	Fp	2	
Palm nut oil fatty acid Palm kernel acid oil	1095 553	0	NI	0	R	(3)	NI	0	0	(2)	NI	(2)	1	2		1	Fp	2	
Palm oil (containing less than 15% free fatty acids) Palm oil	2249 2764	0	NI	0	R	0	NI	0	(0)	(0)	NI	(0)	0	0		1	Fp	2	
Palm oil (containing more than 15% and less than 30% free fatty acids) Non-edible industrial grade palm oil	2364 3127	0	NI	0	R	0	NI	0	0	(2)	NI	(2)	(2)	(2)		1	Fp	2	
Palm oil fatty acid methyl ester Palm oil fatty acid methyl ester	1097 554	0	NI	0	R	0	NI	0	0	0	NI	0	0	1		1	Fp	2	
Palm oil mill effluent oil Palm oil mill effluent oil	2550 4291	(0)	NI	(0)	(R)	(1)	NI	(0)	(0)	(1)	NI	(1)	(0)	(1)		1	Fp	2	8002-75-3

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Palm oil mill effluent oil fatty acid distillate Palm oil mill effluent oil fatty acid distillate	2551 4292	(0)	NI	(0)	(R)	(3)	NI	(0)	(0)	(2)	NI	(2)	(2)	(2)		1	Fp	2	68440-15-3
Palm oil mill effluent oil refined	2552 4293	(0)	NI	(0)	(R)	(1)	NI	(0)	(0)	(1)	NI	(1)	(0)	(1)		1	Fp	2	8002-75-3
Palm olein Palm olein	2250 2765	0	NI	0	R	0	NI	0	(0)	(0)	NI	(0)	0	0		1	Fp	2	
Palm stearin Palm stearin	2251 555	0	NI	0	R	0	NI	0	(0)	(0)	NI	(0)	0	0		1	Fp	2	
Paraffin wax, highly-refined Paraffin wax, highly-refined	1086 556	(5)	NI	(5)	(NR)	0	(0)	(0)	(0)	(0)	NI	(0)	(0)	(0)		1	Fp	2	8002-74-2
Paraffin wax, semi-refined Paraffin wax, semi-refined	2244 565	(5)	NI	(5)	NR	0	(0)	(0)	(0)	(0)	NI	(0)	(0)	(0)	T	1	Fp	3	
Paraldehyde Paraldehyde	1098 557	0	0	0	NR	0	NI	1	0	0	NI	0	1	3		3	D	3	123-63-7
Pentachloroethane Pentachloroethane	1099 558	3	2	2	NI	3	1	1	(1)	1	NI	1	(1)	(1)	CT	0	S	3	76-01-7
1,3-Pentadiene 1,3-Pentadiene	1102 14	2	NI	2	NR	2	NI	0	0	0	NI	0	1	(2)		4	E	2	504-60-9
1,3-Pentadiene (greater than 50%), cyclopentene and isomers, mixtures.	2390 3560	NI	NI	(3)	(NR)	(3)	NI	(2)	(1)	(3)	NI	(3)	(2)	(2)	CMR	4	E	3	
Pentaethylene hexamine Pentaethylenehexamine	1103 560	0	NI	0	NI	4	NI	1	(2)	(3)	NI	(3)	3	(3)	Ss	1	D	3	4067-16-7
Pentane Pentane (all isomers)	1105 561	3	NI	3	R	3	NI	0	0	0	NI	0	1	1		4	E	2	109-66-0
1,5-Pentanedial solution, (5-50%) Glutaraldehyde solutions (50% or less)	1107 362	0	NI	0	R	3	0	1	0	3	NI	3	3	3	SsSr	0	D	3	111-30-8
Pentanoic acid Pentanoic acid	1109 562	1	NI	1	NI	2	NI	1	2	(3)	NI	(3)	3	3		1	FD	3	109-52-4
Pentanoic acid (64%)/2-methyl butyric acid (36%) mixture n-Pentanoic acid (64%)/2-Methyl butyric acid (36%) mixture	2144 2211	(1)	NI	(1)	NI	(2)	NI	(1)	(2)	(3)	NI	(3)	3	(3)		2	FD	3	
1-Pentanol n-Amyl alcohol	1110 473	1	1	1	(R)	1	0	1	0	(3)	NI	(3)	2	3		3	FED	3	71-41-0
2-Pentanol sec-Amyl alcohol	1111 637	1	1	1	R	1	0	0	(0)	(2)	NI	(2)	2	2		3	D	2	6032-29-7
Pentasodium triphosphate (*)	2418 3694	Inorg	0	0	Inorg	1	NI	NI	NI	NI	NI	NI	NI	NI		0	NI	NI	

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Pentene (all isomers)	1992																		
		2	NI	2	NI	(2)	NI	(0)	(0)	(0)	NI	(0)	(0)	(1)		4	E	2	
Pentene (all isomers)	563																		
1-Pentene	1114																		
		2	NI	2	NI	(2)	NI	(0)	(0)	0	NI	0	(0)	(1)		4	E	2	109-67-1
1-Pentene	2679																		
2-Pentene	1115																		
		2	NI	2	NI	2	NI	(0)	(0)	(0)	NI	(0)	(0)	(1)		4	E	2	109-68-2
2-Pentene	2678																		
Phenol	1124																		
		1	2	2	R	3	0	2	2	(3)	NI	(3)	3	3		2	S	3	108-95-2
Phenol	566																		
Phenylxylylethane	1135																		
		5	4	4	NR	(2)	NI	1	0	(1)	NI	(1)	(0)	0		1	F	1	40766-31-2
1-Phenyl-1-xylyl ethane	23																		
Phosphate esters, alkyl(C12-C14)amine (LOA)	1854																		
		2	NI	2	NR	3	NI	0	(0)	(2)	NI	(2)	1	2		3	FD	2	
Phosphate esters, alkyl (C12-C14) amine	1345																		
[[(phosphonomethyl)imino]bis[ethylenenitrilobis(methylene)]]tetrakisphos	2509																		
phonic acid, ammonium salt solution (60% or less)		0	NI	0	NR	2	(0)	(0)	(0)	(1)	NI	(1)	(1)	(1)		(2)	D	1	70714-66-8
	4077																		
Phosphoric acid	1138																		
		0	NI	0	Inorg	1	NI	1	1	3	NI	3	3	3		0	D	3	7664-38-2
Phosphoric acid	567																		
Phosphorus (elemental yellow)	1139																		
		Inorg	(3)	(3)	Inorg	6	4	0	0	0	NI	0	2	1		4	S	2	7732-14-0
Phosphorus, yellow or white (*)	568																		
Phthalic anhydride (molten)	1146																		
		1	NI	1	R	2	0	1	0	(3)	NI	(3)	1	3	SsSr	1	S	3	85-44-9
Phthalic anhydride (molten)	569																		
alpha-Pinene	40																		
		4	NI	4	R	4	NI	0	0	0	NI	0	1	(1)	Ss	3	F	3	80-56-8
alpha-Pinene	109																		
beta-Pinene	41																		
		4	NI	4	(R)	4	NI	0	0	0	NI	0	1	(1)	Ss	3	F	3	1330-16-1
beta-Pinene	141																		
Pine oil	1148																		
		4	NI	4	NR	4	NI	0	0	(1)	NI	(1)	(1)	(1)	Ss	2	Fp	3	8002-09-3
Pine oil	570																		
Piperazine, 68% Aqueous	2433																		
		0	NI	0	NR	2	NI	0	0	2	NI	2	3A	3	SsSrN	2	SD	3	110-85-0
Piperazine, 68% solution	3748																		
Pol (2-8) alkylene (C2-C3) glycols/ Polyalkylene (C2-C10) glycols	2358																		
monoalkyl ethers and their borate esters		(1)	NI	(1)	(R)	(1)	(0)	0	0	0	NI	0	2	2		1	D	2	
	144																		
Polyacrylic acid (40% solution)	2302																		
		(2)	NI	(2)	NR	1	NI	0	0	(1)	NI	(1)	1	1		1	D	1	
Polyacrylic acid solution (40% or less)	2709																		
Polyalkene sulphonic acid (C16-C18), sodium salt	2527																		
		(3)	(2)	(3)	(R)	(4)	NI	(1)	(0)	(2)	NI	(2)	(2)	(2)		0	D	2	
Polyalkene sulphonic acid (C16-C18), sodium salt solution	4236																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Polyalkene sulphonic acid (C20-C28), sodium salt	2481																		
		(5)	(4)	(4)	(NR)	1	0	(1)	(0)	(2)	NI	(2)	(2)	(2)		1	Fp	2	
Polyalkene sulphonic acid (C20-C28), sodium salt	4057																		
Poly(C18-C22)alkyl acrylate in xylene	1151																		
		(3)	NI	(3)	NR	2	NI	0	0	(2)	NI	(2)	2	1		3	Fp	2	
Polyalkyl (C18-C22) acrylate in xylene	580																		
Polyalkylalkenaminesuccinimide, molybdenum oxysulphide	2379																		
		NI	0	0	NR	0	NI	0	0	(0)	NI	(0)	0	0		1	Fp	2	
Polyalkylalkenaminesuccinimide, molybdenum oxysulphide	3422																		
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether	1152																		
		1	NI	1	R	1	0	0	0	0	NI	0	2	2		1	D	2	
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether	576																		
Poly(2-8)alkylene glycol monoalkyl (C1-C6) ether acetate	2254																		
		1	NI	1	NR	2	1	0	0	0	NI	0	2	2		1	D	2	
Poly(2-8)alkylene glycol monoalkyl (C1-C6) ether acetate	575																		
Poly N-alkylmethacrylamide ammonium acrylate copolymer (20 % in DEGME) (**)	2468																		
		0	NI	0	NR	2	NI	NI	NI	NI	NI	NI	NI	NI		2	D	NI	
	3931																		
Poly alkyl methacrylate (C1-C20) (LOA)	1984																		
		(5)	NI	(5)	NR	0	NI	0	0	0	NI	0	0	0		1	Fp	2	
Polyalkyl (C10-C20) methacrylate	2189																		
Poly alkyl(C10-C18) methacrylate/ethylene-propylene copolymeer mixture	2201																		
		0	0	0	NR	0	0	0	0	(1)	NI	(1)	1	1	A	1	Fp	3	
	2188																		
Poly alkyl(C18-C22)methacrylates/lauryl acrylate/vinyl acetate (40% in naphtha)	2512																		
		(5)	(5)	(5)	NR	0	NI	0	0	(1)	NI	(1)	1	(1)		2	Fp	2	
	4161																		
Polyaluminium chloride (sol.)	1136																		
		Inorg	0	0	Inorg	0	NI	(0)	(0)	(1)	NI	(1)	(0)	(1)		0	D	1	1327-41-9
Polyaluminium chloride solution	584																		
Polybutene	1154																		
		0	NI	0	(NR)	(0)	(0)	(0)	(0)	(0)	NI	(0)	(0)	(0)		1	Fp	2	9003-29-6
Polybutene	585																		
Polybutenylsuccinimide in oil	2055																		
		5	NI	5	NR	0	NI	(0)	(0)	(0)	NI	(0)	0	(0)		1	Fp	2	
Polybutenyl succinimide	586																		
Poly(2+)cyclic aromatics	2246																		
		4	4	4	NR	(4)	NI	(1)	(1)	(2)	NI	(2)	(1)	(1)	CM	2	S	3	
Poly(2+)cyclic aromatics	574																		
Polyether, borated	1863																		
		0	NI	0	NR	3	1	0	(0)	(1)	NI	(1)	1	0		1	D	1	
Polyether, borated	572																		
Polyether (molecular weight 2000+) (LOA)	1975																		
		0	NI	0	NR	1	NI	0	(0)	(0)	NI	(0)	0	0		1	Fp	2	
Polyether (molecular weight 1350+)	587																		
Polyethylene amines / paraffin mixtures	1991																		
		(5)	NI	(5)	NR	3	0	0	(1)	(3)	NI	(3)	(2)	(3)	Ss	1	Fp	3	
Polyethylene polyamines (more than 50% C5 -C20 paraffin oil)	591																		
Polyethylene glycol	1157																		
		0	NI	0	NR	0	NI	0	0	0	NI	0	1	1		1	D	1	25322-68-3
Polyethylene glycol	589																		
Polyethylene glycol dimethyl ether	1158																		
		0	NI	0	NR	0	NI	0	0	(1)	NI	(1)	1	(1)		1	D	1	24991-55-7
Polyethylene glycol dimethyl ether	590																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Poly(ethylene glycol) methylbutenyl ether (MW >1000) Poly(ethylene glycol) methylbutenyl ether (MW>1000)	2395 3501	NI	0	0	R	1	NI	0	0	(0)	NI	(0)	0	0		1	D	0	
Polyethylene glycol monooleate 	2569 4377	(0)	NI	(0)	R	3	0	0	0	(0)	NI	(0)	0	0		1	D	0	9004-96-0
Polyethylene glycol sorbitol hexaoleate Polyethylene glycol sorbitol hexaoleate	2533 4242	0	NI	0	R	2	NI	(0)	(0)	(0)	NI	(0)	(0)	(0)		1	Fp	2	
Polyethylene polyamines Polyethylene polyamines	2367 3131	0	NI	0	NR	3	0	1	0	(3)	NI	(3)	2	(3)	Ss	2	D	3	
Polyferric sulphate solution Polyferric sulphate solution	338 592	Inorg	0	0	Inorg	(2)	NI	1	(1)	(3)	NI	(3)	3	(3)		0	D	3	
Polyglycerine, sodium salt, solution Polyglycerin, sodium salt solution (containing less than 3% sodium	1874 593	0	NI	0	R	0	NI	0	0	(3)	NI	(3)	(2)	3		1	D	3	
Polyglycerol Polyglycerol	1511 594	NI	NI	NI	NI	NI	NI	0	(0)	(0)	NI	(0)	(0)	(0)		1	D	0	
Poly (iminoethylene)-graft-N-poly (ethyleneoxy) solution (90% or less) Poly(iminoethylene)-graft-N-poly(ethyleneoxy) solution (90% or less)	2287 2537	0	0	0	NR	0	NI	0	0	(1)	NI	(1)	0	1		0	D	1	
Polyisobutenamine in aliphatic (C10-C14) solvent Polyisobutenamine in aliphatic (C10-C14) solvent	2192 2374	0	0	0	NR	2	NI	0	(0)	(2)	NI	(2)	2	1		2	FED	2	
(Polyisobutene) amino products in aliphatic hydrocarbons (Polyisobutene) amino products in aliphatic hydrocarbons	2455 3811	0	NI	(5)	NR	2	NI	0	0	(1)	NI	(1)	1	0	A	2	Fp	3	
Polyisobutenyl anhydride adduct Polyisobutenyl anhydride adduct	2127 2256	0	NI	0	NR	0	NI	0	0	(1)	NI	(1)	0	1		1	FD	1	
Poly(4+)isobutylene Polyisobutylene (MW≤224)	2264 578	0	NI	0	NR	0	NI	(0)	(0)	(0)	NI	(0)	(0)	(0)		1	Fp	2	
Polymethylene polyphenyl isocyanate Polymethylene polyphenyl isocyanate	1153 595	NI	(2)	(2)	NR	0	0	0	0	(2)	NI	(2)	2	2	SsSr	1	S	2	9016-87-9
Polyolefin acid, potassium salt Potassium salt of polyolefin acid	1895 2199	NI	NI	NI	NR	0	NI	0	0	(0)	NI	(0)	0	0		1	NI	0	
Polyolefinamide alkene(C16+)amine (LOA) Polyolefin amide alkeneamine (C17+)	2104 597	5	NI	5	NR	0	NI	0	0	(1)	NI	(1)	1	(1)		1	Fp	2	
Polyolefin amide alkeneamine (C28+) (LOA) Polyolefin amide alkeneamine (C28+)	1971 598	0	NI	0	NR	0	NI	0	0	(0)	NI	(0)	1	(1)		1	NI	1	
Polyolefin amide alkeneamine borate (C28-C250) (LOA) Polyolefin amide alkeneamine borate (C28-C250)	1970 600	0	NI	0	NR	0	NI	0	0	(0)	NI	(0)	0	(0)		1	Fp	2	
Polyolefin amide alkeneamine/molybden oxysulphide mi Polyolefin amide alkeneamine/molybdenum oxysulphide mixture	2256 603	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI		1	NI	NI	

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Polyolefin amide alkylene amine polyol	1989																		
		0	2	2	NR	0	NI	0	0	(0)	NI	(0)	0	0		1	Fp	3	
Polyolefin amide alkeneamine polyol	602																		
Poly (17+) olefin amine	2049																		
		0	NI	0	NR	2	NI	0	(0)	(1)	NI	(1)	(1)	(1)		1	Fp	2	98761-78-5
Poly (17+) olefin amine	571																		
Polyolefinamine (C28-C250) (LOA)	2107																		
		0	NI	0	NR	2	NI	0	(0)	(2)	NI	(2)	2	(1)		(3)	Fp	2	
Polyolefinamine (C28-C250)	609																		
Polyolefinamine (C28-C250) (LOA)	2107																		
		0	NI	0	NR	2	NI	0	(0)	(2)	NI	(2)	2	(1)		(3)	Fp	2	
Polyolefinamine in alkyl (C2-C4) benzenes	610																		
Polyolefinamine (C28-C250) (LOA)	2107																		
		0	NI	0	NR	2	NI	0	(0)	(2)	NI	(2)	2	(1)		(3)	Fp	2	
Polyolefinamine in aromatic solvent	611																		
Polyolefin aminoester salt	2095																		
		0	NI	0	NR	1	NI	0	0	(1)	NI	(1)	1	(1)		2	Fp	2	
Polyolefin aminoester salts (molecular weight 2000+)	604																		
Polyolefin ester (C28-C250) (LOA)	1969																		
		0	NI	0	NR	0	NI	0	0	(0)	NI	(0)	0	0		1	Fp	2	
Polyolefin ester (C28-C250)	606																		
Polyolefin (molecular weight 300+) (LOA)	1968																		
		0	NI	0	NR	0	NI	0	0	0	NI	0	0	0		1	Fp	2	
Polyolefin (molecular weight 300+)	596																		
Polyolefin phenolic amine (C28-C250) (LOA)	1980																		
		0	NI	0	NI	0	NI	0	0	(1)	NI	(1)	(1)	(1)		1	Fp	2	
Polyolefin phenolic amine (C28-C250)	607																		
Polyolefin phosphoro sulphide - barium derivative (C28-C250) (LOA)	1976																		
		0	NI	0	NI	2	NI	0	(0)	(0)	NI	(0)	(0)	(0)		1	S	0	
Polyolefin phosphorosulphide, barium derivative (C28-C250)	608																		
Poly(oxy-1,2-ethanediyl), alpha-(nonylphenyl)-omega-hydroxy-, phosphate	2506																		
		(4)	(3)	(3)	NR	3	(1)	(1)	(1)	(3)	NI	(3)	(2)	(3)		1	S	3	51811-79-1
Poly(oxy-1,2-ethanediyl), alpha-(nonylphenyl)-omega-hydroxy-,	4158																		
Polyoxyethylene sorbitan monooleate	1442																		
		3	(2)	3	R	2	0	0	(0)	(0)	NI	(0)	0	0		1	D	0	9005-65-6
Poly(20)oxyethylene sorbitan monooleate	577																		
Polyoxypropylene diamine	2352																		
		1	NI	1	NR	1	NI	0	0	(3)	NI	(3)	3	3		1	D	3	
	3112																		
Polyphosphoric acids, esters with triethanolamine, sodium salts solution	2549																		
		0	NI	0	NR	1	0	0	0	(0)	NI	(0)	0	0		1	D	0	68131-72-6
	4290																		
Polypropylene	1512																		
		0	NI	0	NR	(0)	NI	(0)	(0)	(0)	NI	(0)	(0)	(0)		1	F	1	9003-07-0
Poly(5+)propylene	579																		
Polypropylene glycol	1159																		
		0	NI	0	(NR)	1	NI	1	0	(1)	NI	(1)	1	1		1	D	1	25322-69-4
Polypropylene glycol	612																		
Polysiloxane	1161																		
		NI	4	4	NI	2	NI	0	(0)	(0)	NI	(0)	0	0		3	F	1	
Dimethylpolysiloxane	275																		
Polysiloxane	1161																		
		NI	4	4	NI	2	NI	0	(0)	(0)	NI	(0)	0	0		3	F	1	
Polysiloxane	613																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Poly (tetramethylene) ether glycol (mw 600-3000)	2147																		
		2	NI	2	NR	3	NI	0	0	(0)	NI	(0)	0	(0)		1	FD	0	
Poly(tetramethylene ether) glycol (mw 600-3000)	2540																		
Pongamia/Karanja seed oil, crude	2572																		
		(2)	NI	(2)	R	(2)	(1)	(0)	(0)	(1)	NI	(1)	(1)	(1)		1	Fp	2	247588-54-1
	4380																		
Potassium carbonate solution	2465																		
		Inorg	0	0	Inorg	2	NI	0	0	(0)	NI	(0)	2	2		0	D	2	
Potassium carbonate solution	3928																		
Potassium chloride solution	1513																		
		0	0	0	Inorg	1	0	0	(0)	(0)	NI	(0)	0	0		0	D	0	7447-40-7
Potassium chloride solution	614																		
Potassium chloride solution (less than 26%)	2345																		
		Inorg	0	0	Inorg	0	0	0	(0)	(0)	NI	(0)	0	0		0	D	0	
Potassium chloride solution (less than 26%)	3109																		
Potassium formate solution (75% or more)	2121																		
		0	NI	0	R	0	NI	(0)	(0)	(2)	NI	(2)	2	2		0	D	2	590-29-4
Potassium formate solutions (*)	615																		
Potassium hydroxide (sol.)	1171																		
		Inorg	0	0	Inorg	2	NI	2	(2)	(3)	NI	(3)	3C	3		0	D	3	1310-58-3
Potassium hydroxide solution	616																		
Potassium iodide	2484																		
		Inorg	(0)	(0)	Inorg	1	0	0	0	(0)	NI	(0)	0	0	T	0	D	2	7681-11-0
Potassium iodide	4060																		
Potassium oleate	1497																		
		3	NI	3	R	4	NI	(0)	(0)	(1)	NI	(1)	1	1		1	FD	1	143-18-0
Potassium oleate	617																		
Potassium thiosulphate solution (50% or less)	2152																		
		Inorg	0	0	Inorg	2	NI	0	0	(2)	NI	(2)	2	(2)		0	D	2	
Potassium thiosulphate (50% or less)	2335																		
Propanol	1180																		
		0	NI	0	R	0	NI	1	0	0	NI	0	1	2	R	4	D	3	71-23-8
n-Propyl alcohol	488																		
Propanolamine	1183																		
		0	NI	0	R	2	NI	0	1	(3)	NI	(3)	3	3		2	D	3	156-87-6
n-Propanolamine	485																		
2-Propene-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer (aqueous solution)	2420																		
		0	NI	0	R	2	0	0	(0)	(0)	NI	(0)	0	(0)		0	D	0	
	3696																		
2-Propenoic acid polymer with 4-(1,1-dimethylethyl)phenol, formaldehyde, 2,5-furandione, 2-methyloxirane and oxirane (65% in naphtha/xylene)	2491																		
		(5)	NI	(5)	NR	2	NI	0	0	(0)	NI	(0)	(0)	0	A	3	Fp	3	178603-70-8
2-Propenoic acid polymer with 4-(1,1-dimethylethyl)phenol,	4125																		
2-Propenoic acid polymer with furandione (65% in 2-butoxyethanol)	2435																		
		0	NI	0	NR	2	0	1	0	0	NI	0	2	2		2	Fp	2	
2-Propenoic acid polymer with furandione (65% in 2-butoxyethanol)	3750																		
beta-Propiolactone	1184																		
		0	NI	0	R	(2)	NI	2	(2)	4	NI	4	3B	3	CM	2	D	3	57-57-8
beta-Propiolactone	142																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Propionaldehyde	1185																		
		0	NI	0	R	2	NI	1	0	1	NI	1	2	2		4	DE	2	123-38-6
Propionaldehyde	619																		
Propionic acid	1186																		
		0	NI	0	R	2	NI	0	0	(3)	NI	(3)	3B	3		3	D	3	79-09-4
Propionic acid	620																		
Propionic anhydride	1187																		
		0	NI	0	R	2	NI	0	0	(3)	NI	(3)	2	3		2	FD	3	123-62-6
Propionic anhydride	621																		
Propionitrile	1188																		
		0	NI	0	NI	0	NI	3	3	4	NI	4	1	2	R	4	D	3	107-12-0
Propionitrile	622																		
Propyl acetate	1191																		
		1	NI	1	R	2	NI	0	0	0	NI	0	1	1		4	ED	1	109-60-4
n-Propyl acetate	487																		
Propylamine	1194																		
		0	NI	0	NI	1	NI	2	2	3	NI	3	3	3		4	DE	3	107-10-8
n-Propylamine	490																		
Propyl benzene	1196																		
		NI	NI	NI	NI	3	NI	NI	NI	NI	NI	NI	NI	NI		3	FE	NI	103-65-1
Propylbenzene	2686																		
Propyl chloride	1198																		
		2	NI	2	NI	1	NI	0	NI	NI	NI	NI	NI	NI		4	FED	2	540-54-5
n-Propyl chloride	489																		
Propylene carbonate	2056																		
		0	NI	0	R	0	NI	0	0	(3)	NI	(3)	2	3		1	D	3	108-32-7
Propylene carbonate	624																		
Propylene dimer	1201																		
		3	NI	3	R	3	NI	NI	NI	NI	NI	NI	NI	NI		4	E	2	
Propylene dimer	625																		
1,2-Propylene glycol	1202																		
		0	NI	0	R	0	0	0	0	0	NI	0	0	0		1	D	0	57-55-6
Propylene glycol	626																		
Propylene glycol methyl ether acetate	1759																		
		0	NI	0	NR	1	NI	0	0	0	NI	0	0	1		3	D	1	108-65-6
Propylene glycol methyl ether acetate	627																		
Propylene glycol monoalkyl ether	1958																		
		0	NI	0	NR	0	NI	0	1	0	NI	0	2	3		3	D	3	
Propylene glycol monoalkyl ether	628																		
Propylene glycol phenyl ether	2057																		
		1	NI	1	NI	1	NI	0	0	(1)	NI	(1)	(1)	(1)		1	SD	1	4169-04-4
Propylene glycol phenyl ether	629																		
Propylene oxide	76																		
		0	NI	0	R	2	NI	1	2	2	NI	2	2	3	CM	4	DE	3	75-56-9
Propylene oxide	630																		
Propylene oxide/Ethylene oxide mixture	78																		
		0	NI	0	R	1	NI	1	1	3	NI	3	3	3	CMR	4	DE	3	
Ethylene oxide/Propylene oxide mixture with an ethylene oxide content	341																		
Propylene tetramer	2255																		
		NI	4	4	NR	(4)	NI	(0)	(0)	(1)	NI	(1)	(1)	(1)		2	F	1	6842-15-5
Propylene tetramer	631																		
Propylene trimer	1207																		
		5	4	4	NR	3	2	(0)	(0)	(1)	NI	(1)	(1)	(1)		3	FE	2	13987-01-4
Propylene trimer	632																		
Pyridine	1213																		
		0	NI	0	R	3	0	1	1	2	NI	2	1	3		4	D	3	110-86-1
Pyridine	634																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Pyridine bases	2131																		
		1	NI	1	R	2	NI	2	1	(3)	NI	(3)	3B	3		3	FED	3	
Paraldehyde-ammonia reaction product	1989																		
Pyridinium, 1-(phenylmethyl)-, alkyl derivatives, chlorides (30% or less)/Ethoxylated nonylphenols (10% or less) in isopropanol (15% or less)/Methanol (3% or less) solution	2544																		
		(3)	NI	(3)	(NR)	(4)	(2)	(1)	(0)	(3)	NI	(3)	(3B)	(3)	TSs	3	D	3	
	4284																		
Pyridinium, 1-(phenylmethyl)-, ethyl methyl derivs., chlorides	2507																		
		3	NI	3	NR	4	2	NI	NI	NI	NI	NI	(3B)	(3)		3	D	3	68909-18-2
Pyridinium, 1-(phenylmethyl)-, ethyl methyl derivs., chlorides	4159																		
Pyrolysis gasoline	2271																		
		(4)	(3)	(3)	(R)	(3)	(1)	1	0	(2)	NI	(2)	2	2	TCM	4	FE	3	
Pyrolysis gasoline (containing benzene)	1990																		
Quaternary ammonium compounds, benzyl-C12-18 (even-numbered)-alkyldimethyl, chlorides	2565																		
		(3)	NI	(3)	(R)	(4)	(1)	(1)	(0)	(3)	NI	(3)	(3B)	(3)		1	FD	3	68391-01-5
	4323																		
Quaternary ammonium compounds, benzyl-C12-14 (even-numbered)-alkyldimethyl, chlorides solution	2494																		
		3	NI	3	NR	4	NI	1	0	(3)	NI	(3)	3B	3		2	D	3	68424-85-1
	4128																		
Rapeseed oil (high erucic acid; containing less than 4% free fatty acids)	2315																		
		0	NI	0	R	(2)	NI	(0)	(0)	(0)	NI	(0)	(1)	(1)		1	Fp	2	
Rapeseed oil	3045																		
Rapeseed oil (Low erucic acid containing less than 4% free fatty acids)	2296																		
		0	NI	0	R	(2)	NI	0	0	0	NI	0	(1)	(1)		1	Fp	2	
Rapeseed oil (low erucic acid containing less than 4% free fatty acids)	2956																		
Rape seed oil fatty acid, methyl ester	2209																		
		0	0	0	R	0	NI	0	(0)	(1)	NI	(1)	1	1		1	Fp	2	
Rape seed oil fatty acid methyl esters	2576																		
Rice bran oil (containing less than 15% of free fatty acids)	2312																		
		(0)	NI	(0)	(R)	(0)	NI	0	(0)	(1)	NI	(1)	0	1		1	Fp	2	
Rice bran oil	3043																		
Rosin	1219																		
		3	NI	3	NR	3	NI	0	0	2	NI	2	(1)	1	Ss	1	S	2	8050-09-7
Rosin	635																		
Rosin soap (disproportionated solution)	1220																		
		3	NI	3	NR	3	NI	0	NI	NI	NI	NI	NI	NI		0	S	NI	
Rosin soap (disproportionated) solution	636																		
Safflower oil (containing less than 5% free fatty acids)	1222																		
		(0)	NI	(0)	(R)	(0)	NI	(0)	(0)	(1)	NI	(1)	1	1		1	Fp	2	8001-23-8
Safflower oil	3041																		
Saturated and unsaturated alkyl (C10-C20) phosphite (LOA)	2108																		
		0	NI	0	R	1	NI	0	0	(0)	NI	(0)	0	0		1	Fp	2	
Alkyl (C10-C20, saturated and unsaturated) phosphite	96																		
Shea butter (containing less than 15% free fatty acids)	2311																		
		(0)	NI	(0)	NR	(0)	NI	(0)	(0)	(1)	NI	(1)	(0)	(1)		1	Fp	2	
Shea butter	3042																		
Silica slurry	1514																		
		Inorg	0	0	Inorg	0	0	(0)	(0)	0	NI	0	(0)	(0)		0	S	0	7631-86-9
Microsilica slurry	2507																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Sodium acetate	1498																		
		0	NI	0	R	0	NI	0	0	0	NI	0	1	1		0	D	1	127-09-3
Sodium acetate solutions	639																		
Sodium aluminate (solution)	1234																		
		Inorg	0	0	Inorg	3	1	(0)	(0)	(3)	NI	(3)	(3)	(3)		0	D	3	11138-49-1
Sodium aluminate solution	641																		
Sodium aluminosilicate slurry	1235																		
		Inorg	0	0	Inorg	1	0	0	0	0	NI	0	1	1		0	S	1	1344-00-9
Sodium aluminosilicate slurry	643																		
Sodium benzoate	1475																		
		0	NI	0	R	1	NI	0	(0)	(1)	NI	(1)	0	1		1	D	1	532-32-1
Sodium benzoate	644																		
Sodium bicarbonate solution (less than 10%)	2386																		
		0	NI	0	Inorg	0	0	0	0	(0)	NI	(0)	0	0		0	D	0	144-55-8
Sodium bicarbonate solution (less than 10%)	3558																		
Sodium borohydride/sodium hydroxide mixture (soln.)	1239																		
		Inorg	0	0	Inorg	2	NI	(2)	(1)	(3)	NI	(3)	(3)	(3)		0	D	3	
Sodium borohydride (15% or less)/Sodium hydroxide solution (*)	645																		
Sodium bromide solution (less than 50%)	2387																		
		Inorg	NI	0	Inorg	0	0	0	0	(1)	NI	(1)	0	1	R	0	D	3	7647-15-6
Sodium bromide solution (less than 50%) (*)	3410																		
Sodium carbonate	1243																		
		Inorg	0	0	Inorg	1	NI	0	0	2	NI	2	1	2		0	SD	2	497-19-8
Sodium carbonate solution (*)	646																		
Sodium chlorate solid and solutions (50% or less)	1244																		
		Inorg	0	0	Inorg	1	NI	1	0	(2)	NI	(2)	1	1		0	D	2	7775-09-9
Sodium chlorate solution (50% or less) (amended) (*)	647																		
Sodium chloride solution	2521																		
		Inorg	0	0	Inorg	0	0	0	0	0	NI	0	1	2		0	D	0	
Sodium chloride solution (less than 30%)	4229																		
Sodium dichromate solution	487																		
		Inorg	0	0	Inorg	4	1	2	2	4	NI	4	2	3	CMSsSr	0	D	3	10588-01-9
Sodium dichromate solution (70% or less)	649																		
Sodium dodecylpoly(oxyethylene) sulphate solution	2531																		
		(3)	NI	(3)	R	3	NI	(0)	(0)	(3)	NI	(3)	(2)	(3)		1	D	3	
Sodium dodecylpoly(oxyethylene) sulphate solution	4240																		
Sodium dodecyl sulphate (*)	2451																		
		0	NI	0	R	3	1	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI	
	3869																		
Sodium hydrogen sulphide/Ammonium sulphide(mixture)	1253																		
		Inorg	0	0	Inorg	3	NI	(2)	(2)	(3)	NI	(3)	(3)	(3)		4	D	3	
Sodium hydrosulphide/Ammonium sulphide solution (*)	653																		
Sodium hydrogen sulphide (6% or less)/sodium carbonate (3% or less)	2262																		
		0	NI	0	Inorg	1	NI	(0)	(0)	(1)	NI	(1)	(1)	(1)		2	D	1	
Sodium hydrogen sulphide (6% or less)/Sodium carbonate (3% or less)	650																		
Sodium hydrogen sulphide,solutions	1252																		
		Inorg	0	0	Inorg	1	NI	2	2	(3)	NI	(3)	(3)	3		3	D	3	16721-80-5
Sodium hydrosulphide solution (45% or less) (*)	652																		
Sodium hydrogen sulphite,solutions	1251																		
		Inorg	0	0	Inorg	1	NI	0	(0)	(0)	NI	(0)	0	0		0	D	0	7631-90-5
Sodium hydrogen sulphite solution (45% or less)	651																		
Sodium hydroxide (30% or less)/Sodium aluminate (25% or less)	2486																		
solution		Inorg	(0)	(0)	Inorg	3	1	0	(0)	(3)	NI	(3)	3	(3)		1	D	3	
	3914																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Sodium hydroxide solution	1254																		
		Inorg	0	0	Inorg	2	NI	1	1	3	NI	3	3C	3		0	D	3	1310-73-2
Sodium hydroxide solution (*)	654																		
Sodium hypochlorite solutions containing 20% and less but more than 2% NaOCl	1256																		
		Inorg	0	0	Inorg	(4)	(1)	0	0	1	NI	1	3	3		0	D	3	7681-52-9
Sodium hypochlorite solution (15% or less)	2785																		
Sodium hypochlorite solutions containing more than 20% Na0Cl	1255																		
		Inorg	0	0	Inorg	5	2	0	0	1	NI	1	3	3		0	D	3	7681-52-9
Sodium hypochlorite solution (Full strength solution)	655																		
Sodium methylate (**)	2443																		
		NI	NI	(0)	(R)	(2)	NI	NI	NI	NI	NI	NI	NI	NI	T	1	DE	NI	
Sodium methylate	3822																		
Sodium Methylate (21-30% in Methanol)	2427																		
		0	NI	0	R	1	NI	2	(2)	(3)	NI	(3)	3	3	T	3	D	3	
Sodium methylate 21-30% in methanol	3608																		
Sodium nitrate	1259																		
		Inorg	0	0	Inorg	0	NI	(0)	(0)	(0)	NI	(0)	(1)	(1)		NI	SD	1	7631-99-4
Sodium nitrate	656																		
Sodium nitrite	340																		
		Inorg	0	0	Inorg	3	0	2	(2)	2	NI	2	0	1		0	SD	2	7632-00-0
Sodium nitrite solution	658																		
Sodium oxalate solution	2518																		
		0	(1)	(1)	R	2	1	1	0	(2)	NI	(2)	(2)	2		0	D	2	
Sodium oxalate solution	4199																		
Sodium perborate monohydrate	2284																		
		Inorg	NI	NI	Inorg	3	NI	1	0	(3)	NI	(3)	2	3		0	NI	3	
Sodium perborate monohydrate	2948																		
Sodium petroleum sulphonate	1860																		
		0	NI	0	(NR)	2	NI	0	(0)	(2)	NI	(2)	1	2		1	S	2	
Sodium petroleum sulphonate	660																		
Sodium polyacrylate solution	1487																		
		0	NI	0	NR	1	0	0	(0)	(1)	NI	(1)	1	1		0	D	1	
Sodium poly(4+)acrylate solutions	826																		
Sodium silicate (solution)	1262																		
		Inorg	0	0	Inorg	2	NI	1	0	(3)	NI	(3)	3	3		0	D	3	1344-09-8
Sodium silicate solution	661																		
Sodium sulphate (solution)	1499																		
		Inorg	0	0	Inorg	0	0	0	(0)	(1)	NI	(1)	1	1		0	SD	1	7757-82-6
Sodium sulphate solutions	662																		
Sodium sulphide (solution)	1263																		
		Inorg	0	0	Inorg	3	NI	1	1	(3)	NI	(3)	3A	3		1	D	3	1313-82-2
Sodium sulphide solution (15% or less)	663																		
Sodium sulphite (solution)	9																		
		Inorg	0	0	Inorg	2	NI	0	(0)	(1)	NI	(1)	0	1		0	D	1	7757-83-7
Sodium sulphite solution (25% or less)	664																		
Sodium tartrate succinate/Sodium tartrate disuccinate mixtures	1771																		
		NI	1	1	NI	1	NI	0	NI	NI	NI	NI	NI	NI		1	D	NI	
Sodium tartrates/Sodium succinates solution	665																		
Sodium thiocyanate	1264																		
		Inorg	0	0	Inorg	2	NI	1	(0)	(1)	NI	(1)	0	0		0	D	1	540-72-7
Sodium thiocyanate solution (56% or less)	667																		
Sorbitan monooleate	2215																		
		(5)	NI	(5)	R	3	NI	0	NI	NI	NI	NI	0	0		1	Fp	2	
Sorbitan monooleate	2408																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Sorbitan sesquioleate	2532																		
		0	NI	0	NR	0	1	0	(0)	(2)	NI	(2)	1	0		1	Fp	2	8007-43-0
Sorbitan sesquioleate	4241																		
Sorbitol	1265																		
		0	NI	0	R	0	NI	0	(0)	(0)	NI	(0)	(0)	(0)		1	D	0	50-70-4
Sorbitol solution	668																		
Sorbitol, propoxylated	2529																		
		1	NI	1	NR	1	0	0	0	(0)	NI	(0)	0	0		1	D	0	
Sorbitol Propoxylated	4238																		
Soyabean oil (containing less than 4% free fatty acids)	2320																		
		0	NI	0	R	0	NI	0	(0)	(1)	NI	(1)	(0)	1		1	Fp	2	
Soyabean oil	3050																		
Soybean oil fatty acids, methyl esters	2431																		
		0	NI	0	R	2	NI	0	0	0	NI	0	0	0		1	Fp	2	
Soybean Oil Fatty Acid Methyl Ester	3737																		
Spent bleaching earth vegetable oil (up to 20% free fatty acids, less than 1% hexane)	2563																		
		(0)	NI	(0)	(R)	(0)	NI	(0)	(0)	(2)	NI	(2)	(2)	(2)		1	Fp	2	8002-75-3
	4321																		
Spent bleaching earth vegetable oil fatty acid distillate	2564																		
		(0)	NI	(0)	(R)	(3)	NI	(0)	(0)	(2)	NI	(2)	(2)	(2)		1	Fp	2	68440-15-3
Spent bleaching earth vegetable oil fatty acid distillate	4322																		
Styrene (monomer)	1273																		
		3	(2)	3	R	3	NI	1	0	2	NI	2	2	2	CM	3	FE	3	100-42-5
Styrene monomer	669																		
Styrene butadiene rubber latex	1274																		
		0	NI	0	NR	0	NI	0	0	(1)	NI	(1)	0	1		0	D	1	
Latex: Carboxylated styrene-Butadiene copolymer; Styrene-Butadiene	414																		
Sulpho hydrocarbon (C3-C88) (LOA)	1972																		
		4	NI	4	NR	2	NI	0	0	0	NI	0	0	0		2	Fp	2	
Sulphohydrocarbon (C3-C88)	672																		
Sulpholane	1277																		
		0	1	1	NR	2	0	1	0	0	NI	0	1	2		1	SD	2	126-33-0
Sulpholane	673																		
Sulphonated polyacrylate solution	1760																		
		NI	0	0	NI	0	NI	(0)	(0)	(0)	NI	(0)	(0)	(0)		0	D	0	
Sulphonated polyacrylate solution	674																		
Sulphur	906																		
		Inorg	0	0	Inorg	0	NI	0	0	(1)	NI	(1)	1	1		1	S	1	7704-34-9
Sulphur (molten) (*)	675																		
Sulphuric acid	1280																		
		0	NI	0	Inorg	2	NI	0	(0)	3	NI	3	3C	3	C	0	D	3	7664-93-9
Oleum	549																		
Sulphuric acid	1280																		
		0	NI	0	Inorg	2	NI	0	(0)	3	NI	3	3C	3	C	0	D	3	7664-93-9
Sulphuric acid	676																		
Sulphuric acid	1280																		
		0	NI	0	Inorg	2	NI	0	(0)	3	NI	3	3C	3	C	0	D	3	7664-93-9
Sulphuric acid, spent	677																		
Sulphurized fat(C14-C20) (LOA)	1853																		
		0	NI	0	NR	1	NI	0	(0)	(1)	NI	(1)	0	(1)		1	FD	1	
Sulphurized fat (C14-C20)	2257																		
Sulphurized polyolefinamide alkene(C28-C250)amine (LOA)	1855																		
		0	NI	0	NR	0	NI	0	0	(0)	NI	(0)	0	0		1	FD	0	
Sulphurized polyolefinamide alkene (C28-C250) amine	2258																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Sunflower oil	1283																		
		0	NI	0	R	0	NI	(0)	(0)	(1)	NI	(1)	(0)	(1)		1	Fp	2	8001-21-6
Sunflower seed oil	2782																		
sym-Dichlorodiethyl ether	588																		
		1	1	1	NR	1	0	2	3	4	NI	4	1	3		3	SD	3	111-44-4
Dichloroethyl ether	233																		
Tall oil acids/linoleic acid	2448																		
dimer/polyalkylenepolyamines/dodecylbenzenesulphonic acid		0	NI	0	NR	1	NI	0	0	(0)	NI	(0)	0	0	CM	3	Fp	3	
complexes in naphtha/isopropanol	3866																		
Tall oil acids reaction products with diethylenetriamine and acrylic acid	2497																		
in ethylene glycol																			
		3	NI	3	R	2	NI	0	0	(1)	NI	(1)	0	1	Ss	1	D	2	85586-18-1
Tall oil acids reaction products with diethylenetriamine and acrylic acid																			
in ethylene glycol	4131																		
Tall oil acids reaction products with triethanolamine	2492																		
		4	NI	4	NR	2	NI	0	0	(1)	NI	(1)	1	0		1	Fp	2	67784-78-5
Tall oil acids reaction products with triethanolamine	4126																		
Tall oil, crude and distilled	1285																		
		(4)	NI	(4)	(R)	(2)	NI	0	0	(0)	NI	(0)	0	0	Ss	1	Fp	2	68187-71-3
Tall oil (crude and distilled)	678																		
Tall oil, distilled	2283																		
		0	NI	0	R	0	NI	0	(0)	(0)	NI	(0)	0	(0)		1	Fp	2	
Tall oil, distilled	2890																		
Tall oil fatty acid (resin acids less than 20%)	1287																		
		0	0	0	R	0	0	0	0	(1)	NI	(1)	1	0		1	Fp	2	61790-12-3
Tall oil fatty acid (resin acids less than 20%)	679																		
Tall oil fatty acid, barium salt	1864																		
		NI	NI	NI	NI	NI	NI	(1)	(0)	(2)	NI	(2)	1	2		1	S	2	
Tall oil fatty acid, barium salt	680																		
Tall oil fatty acids reaction products with 2-[(2-	2508																		
aminoethyl)amino]ethanol, di-ethyl sulphate quaternized		(3)	NI	(3)	NR	5	2	NI	NI	NI	NI	NI	(2)	(3)	Ss	4	D	3	70955-34-9
	4160																		
Tall-oil fatty acids reaction products with diethylenetriamine	2554																		
		2	NI	2	NR	4	1	0	(0)	(3)	NI	(3)	3A	3	Ss	1	Fp	3	1226892-43-8
	4295																		
Tall oil pitch	2323																		
		3	NI	3	NR	0	0	0	0	(0)	NI	(0)	0	(0)		1	Fp	2	
Tall oil pitch	3051																		
Tall oil soap (disproportionated solution)	1286																		
		NI	NI	NI	NI	NI	NI	(1)	(0)	(2)	NI	(2)	1	2		0	D	2	
Tall oil soap (disproportionated) solution	681																		
Tall oil soap, crude	2432																		
		0	NI	0	R	2	0	(0)	(0)	(3)	NI	(3)	(3)	(3)	Ss	1	Fp	3	
Tall oil soap, crude	3735																		
Tallow	1288																		
		0	NI	0	R	0	NI	0	0	(0)	NI	(0)	(0)	(0)		1	Fp	2	61789-21-6
Tallow	682																		
Tallowamidopropylamine Oxide in propylene glycol (70% or less)	2482																		
		NI	(2)	(2)	(R)	(4)	(2)	(1)	(1)	(3)	NI	(3)	(3)	(3)		1	D	3	
	4058																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Tallow fatty acid	1289																		
		0	NI	0	R	0	NI	0	(0)	(0)	NI	(0)	(0)	(0)		1	Fp	2	
Tallow fatty acid	684																		
1,1,2,2-Tetrachloroethane	53																		
		2	2	2	NR	3	0	2	0	2	NI	2	2	2		0	SD	2	79-34-5
Tetrachloroethane	687																		
1,1,2,2-Tetrachloroethylene	1295																		
		3	2	2	NR	(3)	2	0	0	0	NI	0	2	1	C	0	S	3	127-18-4
Perchloroethylene	564																		
Tetrachloromethane	1296																		
		2	2	2	NR	3	0	0	0	0	NI	0	1	1	CT	0	S	3	56-23-5
Carbon tetrachloride	178																		
Tetradecanoic acid (Myristic acid)	1298																		
		5	NI	0	R	0	NI	0	(0)	(1)	NI	(1)	(1)	(1)		1	Fp	2	544-63-8
Fatty acid (saturated C13+)	347																		
Tetradecanoic acid (Myristic acid)	1298																		
		5	NI	0	R	0	NI	0	(0)	(1)	NI	(1)	(1)	(1)		1	Fp	2	544-63-8
n-Tetradecanoic acid	491																		
Tetraethylene glycol	1301																		
		0	NI	0	NR	0	NI	0	0	0	NI	0	1	1		1	D	1	112-60-7
Tetraethylene glycol	688																		
Tetraethylene pentamine	1302																		
		0	NI	0	NR	3	NI	0	2	(3)	NI	(3)	3	3	Ss	1	D	3	112-57-2
Tetraethylene pentamine	689																		
Tetraethyl lead	1303																		
		4	5	5	NR	5	NI	3	2	4	NI	4	2	2	NR	3	S	3	78-00-2
Motor fuel anti-knock compound (containing lead alkyls)	464																		
Tetrahydrofuran	1304																		
		0	NI	0	R	0	NI	0	(0)	0	NI	0	1	2		4	DE	2	109-99-9
Tetrahydrofuran	690																		
Tetrahydronaphthalene	1305																		
		3	3	3	NR	3	NI	0	0	(2)	NI	(2)	2	0		2	F	2	119-64-2
Tetrahydronaphthalene	691																		
1,2,3,4-Tetramethylbenzene	1307																		
		4	NI	4	NI	4	NI	0	(0)	(1)	NI	(1)	1	(1)		2	F	1	488-23-3
Tetramethylbenzene (all isomers)	692																		
Tetrapotassium pyrophosphate	2400																		
		Inorg	0	0	Inorg	1	NI	0	NI	NI	NI	NI	NI	NI		0	D	NI	7320-34-5
Tetrapotassium pyrophosphate	3635																		
Thioglycolic acid	2496																		
		0	NI	0	R	2	NI	2	2	3	NI	3	3B	3		1	D	3	68-11-1
Thioglycolic acid	4130																		
Thixatrol plus	2210																		
		5	NI	5	R	3	NI	0	0	0	NI	0	1	1		NI	S	1	
Thixatrol Plus	2699																		
Titanium dioxide slurry	2080																		
		Inorg	1	1	Inorg	1	NI	0	0	0	NI	0	1	1		0	S	1	13463-67-7
Titanium dioxide slurry	2259																		
Toluene	330																		
		2	2	2	R	3	0	0	0	0	NI	0	2	2	ANR	4	E	3	108-88-3
Toluene	693																		
Toluene diisocyanate	1315																		
		(3)	1	1	NR	2	NI	0	(0)	4	NI	4	3	3	CSsSr	1	S	3	584-84-9
Toluene diisocyanate	694																		
Toluidines	1316																		
		1	1	1	R	4	2	1	0	(2)	NI	(2)	2	2	CM	2	FD	3	
o-Toluidine	537																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
2,4-Tolylenediamine	1317																		
		0	2	2	NR	3	0	2	2	4	NI	4	2	3	CMSs	1	Fp	3	95-80-7
Toluenediamine	695																		
Tolyl triazole	2292																		
		1	NI	1	NR	2	0	1	0	(2)	NI	(2)	(1)	2		1	S	2	
Tolyl triazole	696																		
Tributyl phosphate	1319																		
		4	2	2	R	3	0	1	0	2	NI	2	2	2		1	F	2	126-73-8
Tributyl phosphate	697																		
1,2,3-Trichlorobenzene	2191																		
		4	4	4	NR	4	2	1	0	(2)	NI	(2)	2	2		1	S	2	
1,2,3-Trichlorobenzene (molten)	2288																		
1,2,4-Trichlorobenzene	1323																		
		4	5	5	NR	4	1	1	0	(2)	NI	(2)	2	2	M	1	S	3	120-82-1
1,2,4-Trichlorobenzene	7																		
1,1,1-Trichloroethane	1326																		
		2	NI	2	NR	2	NI	0	0	0	NI	0	2	2		0	SD	2	71-55-6
1,1,1-Trichloroethane	1																		
1,1,2-Trichloroethane	1327																		
		2	1	1	NR	2	0	1	0	1	NI	1	2	1		0	SD	2	79-00-5
1,1,2-Trichloroethane	3																		
1,1,2-Trichloro-ethylene	329																		
		2	2	2	NR	3	NI	0	0	0	NI	0	2	2	MC	0	SD	3	79-01-6
Trichloroethylene	698																		
Trichloromethane	1328																		
		1	1	1	NR	2	0	2	0	2	NI	2	1	1	CT	0	SD	3	67-66-3
Chloroform	186																		
1,2,3-Trichloropropane	1329																		
		2	2	2	NR	2	0	2	2	2	NI	2	2	2	C	2	SD	3	96-18-4
1,2,3-Trichloropropane	6																		
1,1,2-Trichloro-1,2,2-trifluoroethane	1330																		
		3	2	2	NR	3	0	0	0	0	NI	0	1	1		0	S	1	76-13-1
1,1,2-Trichloro-1,2,2-Trifluoroethane	2																		
Tricresyl phosphate (less than 1% ortho-isomers)	1331																		
		5	(3)	(3)	(R)	(4)	(4)	0	1	0	NI	0	1	1	N	1	S	2	1330-78-5
Tricresyl phosphate (containing less than 1% ortho-isomer)	700																		
Tricresyl phosphate (more than 1% ortho-isomers)	1332																		
		5	3	3	R	4	4	0	1	0	NI	0	1	1	N	1	S	2	1330-78-5
Tricresyl phosphate (containing 1% or more ortho-isomer)	699																		
Tricyanohexane	2530																		
		0	NI	0	NR	1	NI	1	0	(1)	NI	(1)	0	0		1	SD	1	
Tricyanohexane	4239																		
Tridecane	1333																		
		0	NI	0	NI	0	NI	0	0	(1)	NI	(1)	1	0		2	Fp	2	629-50-5
Tridecane	701																		
Tridecanoic acid	1334																		
		5	NI	5	(R)	3	NI	(0)	(0)	(1)	NI	(1)	(1)	(1)		1	Fp	2	638-53-9
Tridecanoic acid	702																		
Tridecyl acetate	1768																		
		5	NI	5	NI	0	NI	0	(0)	(2)	NI	(2)	2	2		2	F	2	1072-33-9
Tridecyl acetate	703																		
Triethanolamine	1338																		
		0	0	0	R	1	NI	0	0	(2)	NI	(2)	1	2		1	D	2	102-71-6
Triethanolamine	704																		
3-(Triethoxysilyl)propylamine	2445																		
		1	1	1	R	1	NI	1	0	(3)	NI	(3)	3B	3	Ss	2	D	3	919-30-2
3-(Triethoxysilyl)propylamine	3824																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Triethylamine	1339																		
		1	0	0	R	3	0	1	2	2	NI	2	2	3		4	D	3	121-44-8
Triethylamine	706																		
1,3,5-Triethylbenzene	1340																		
		5	NI	5	NI	4	NI	0	(0)	(2)	NI	(2)	(2)	(1)		2	F	2	25340-18-5
Triethylbenzene	707																		
Triethylene glycol	1341																		
		0	NI	0	R	0	0	0	0	0	NI	0	0	0		1	D	0	112-27-6
Triethylene glycol	708																		
Triethylenetetramine	1346																		
		0	NI	0	NR	3	NI	0	2	(3)	NI	(3)	3	3	Ss	1	D	3	112-24-3
Triethylenetetramine	709																		
Triethylenetetramine/2-piperazine-1-ylethylamine mixtures	2456																		
		0	NI	0	NR	2	NI	0	2	(3)	NI	(3)	3	3	Ss	1	D	3	
	3872																		
Triethyl phosphate	1348																		
		0	0	0	NR	1	0	1	0	0	NI	0	(2)	(2)		1	D	2	78-40-0
Triethyl phosphate	705																		
Triethyl phosphite	1349																		
		0	NI	0	R	1	NI	1	0	2	NI	2	1	2	Ss	3	FE	2	122-52-1
Triethyl phosphite	710																		
Triglycerides, C16-C18 and C18 unsaturated, reclaimed (UCO)	2470																		
		(5)	NI	(5)	R	(0)	(0)	(0)	(0)	(1)	NI	(1)	(1)	(1)		1	Fp	2	68990-65-8
Used cooking oil (m)	3974																		
Triglycerides, C16-C18 and C18 unsaturated, reclaimed (UCO)	2470																		
		(5)	NI	(5)	R	(0)	(0)	(0)	(0)	(1)	NI	(1)	(1)	(1)		1	Fp	2	68990-65-8
Used cooking oil (Triglycerides, C16-C18 and C18 unsaturated) (m) (n)	4023																		
Triisopropanolamine	1370																		
		0	0	0	NR	1	0	1	0	0	NI	0	(2)	3		1	FD	3	122-20-3
Triisopropanolamine	711																		
Triisopropylated phenyl phosphates	1375																		
		5	5	5	R	4	NI	0	0	0	NI	0	0	0		1	S	0	68937-41-7
Triisopropylated phenyl phosphates	712																		
Trimethylacetic acid	1350																		
		1	1	1	R	2	NI	1	1	(2)	NI	(2)	2	2		2	Fp	2	75-98-9
Trimethylacetic acid	714																		
Trimethylamine	1353																		
		0	NI	0	R	1	NI	1	0	2	NI	2	3	3		4	DE	3	75-50-3
Trimethylamine solution (30% or less)	715																		
1,2,3-Trimethyl benzene	1354																		
		3	3	3	NR	4	0	0	0	1	NI	1	2	1		3	FE	2	526-73-8
Trimethylbenzene (all isomers)	716																		
2,4,4-Trimethyl hexamethylene diamine	1359																		
		1	NI	1	NI	NI	NI	1	0	(3)	NI	(3)	2	3	Ss	1	D	3	25620-58-0
Trimethylhexamethylenediamine (2,2,4- and 2,4,4-isomers)	718																		
Trimethyl hexamethylene diisocyanate	1360																		
		0	NI	0	NI	3	NI	0	NI	NI	NI	NI	NI	NI	SsSr	1	NI	2	28679-16-5
Trimethylhexamethylene diisocyanate (2,2,4- and 2,4,4-isomers)	717																		
Trimethylol propane polyethoxylate	1362																		
		NI	NI	NI	NR	1	NI	0	0	NI	NI	NI	NI	NI		1	NI	NI	
Trimethylolpropane polyethoxylate	719																		
Trimethylol propane, propoxylated	2274																		
		0	NI	0	(NR)	1	0	0	0	(1)	NI	(1)	0	1		1	SD	1	
Trimethylol propane propoxylated	2870																		
2,2,4-Trimethyl-1,3-pentanediol diisobutyrate	1845																		
		4	NI	4	NR	0	NI	0	0	(1)	NI	(1)	1	0		1	F	1	
2,2,4-Trimethyl-1,3-pentanediol diisobutyrate	26																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate	1364																		
		3	NI	3	NI	2	NI	0	0	(1)	NI	(1)	1	1		1	Fp	2	25264-77-4
2,2,4-Trimethyl-1,3-pentanediol-1-isobutyrate	27																		
Trimethyl phosphite	1365																		
		0	NI	0	R	NI	NI	NI	NI	NI	NI	NI	NI	NI		3	S	NI	121-45-9
Trimethyl phosphite	713																		
1,3,5-Trioxane	1844																		
		0	NI	0	NI	0	NI	0	0	0	NI	0	0	1	R	3	SD	3	110-88-3
1,3,5-Trioxane	10																		
Tripropylene glycol	1372																		
		0	0	0	R	0	0	0	0	(0)	NI	(0)	0	0		1	D	0	24800-44-0
Tripropylene glycol	720																		
Trixylenyl phosphate	1377																		
		5	4	4	NR	4	1	(0)	(1)	(0)	NI	(0)	(1)	(1)	R	1	S	3	25155-23-1
Trixylyl phosphate	721																		
Tung oil	1378																		
		0	NI	0	R	(2)	NI	(0)	(0)	(1)	NI	(1)	(0)	(1)		1	Fp	2	
Tung oil	2784																		
Turpentine (wood)	1379																		
		4	NI	4	NI	4	NI	0	(0)	1	NI	1	(2)	2	SsA	3	D	2	8006-64-2
Turpentine	722																		
Undecanoic acid	1381																		
		4	NI	4	(R)	3	NI	(0)	(0)	(2)	NI	(2)	1	(2)		1	Fp	2	112-37-8
Undecanoic acid	723																		
1-Undecanol	1382																		
		4	NI	4	R	4	NI	0	0	(2)	NI	(2)	2	(1)		1	Fp	2	112-42-5
Undecyl alcohol	724																		
1-Undecene	1383																		
		5	NI	5	NR	4	NI	(0)	(0)	(1)	NI	(1)	(2)	(1)	A	2	F	3	821-95-4
1-Undecene	24																		
Urea	1384																		
		0	0	0	R	1	NI	0	0	(1)	NI	(1)	1	(1)		0	D	1	57-13-6
Urea solution	726																		
Urea	1384																		
		0	0	0	R	1	NI	0	0	(1)	NI	(1)	1	(1)		0	D	1	57-13-6
Urea	2627																		
Urea/Ammonium mono and dihydrogen phosphate/ Potassium chloride solution	1386																		
		0	0	0	R	3	2	NI	NI	NI	NI	NI	NI	NI		0	NI	NI	
	727																		
Urea/Ammonium nitrate solution (containing < 1% aq. ammonia)	1387																		
		0	NI	0	R	(2)	(0)	0	0	(1)	NI	(1)	(1)	(1)		0	D	1	
Urea/Ammonium nitrate solution	729																		
Urea-ammonium phosphate solutions	2179																		
		0	0	0	R	3	2	(0)	(0)	(2)	NI	(2)	(2)	(2)		0	D	2	
Urea/Ammonium phosphate solution	730																		
Urea-formaldehyde resin solution	1388																		
		NI	NI	NI	NI	1	NI	1	1	NI	NI	NI	NI	NI	Ss	0	NI	2	
Urea formaldehyde resin solution	725																		
Vegetable acid oils	2371																		
		0	NI	0	R	0	NI	(0)	(0)	(1)	NI	(1)	(1)	(1)		NI	Fp	2	
Vegetable acid oils (m)	3138																		
Vegetable oils fatty acid distillates	2369																		
		0	NI	0	R	0	NI	(0)	(0)	(0)	NI	(0)	(0)	(0)		NI	Fp	2	
Vegetable fatty acid distillates (m)	3137																		

EHS Name TRN Name	EHS TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3a	C3b	C3	D1	D2	D3	E1	E2	E3	CAS No.
Vegetable protein solution,hydrolyzed	1398																		
		0	NI	0	R	0	NI	(0)	(0)	(0)	NI	(0)	(0)	(0)		0	D	0	
Vegetable protein solution (hydrolysed)	734																		
Vinyl acetate	1400																		
		0	NI	0	R	2	NI	1	0	2	NI	2	1	1	C	4	ED	3	108-05-4
Vinyl acetate	735																		
Vinyl ethyl ether	1405																		
		1	NI	1	NR	1	NI	0	0	0	NI	0	1	1		4	E	2	109-92-2
Vinyl ethyl ether	736																		
Vinylidene chloride	1406																		
		2	1	1	NR	2	NI	2	0	(2)	NI	(2)	2	2	M	4	SD	3	75-35-4
Vinylidene chloride	738																		
Vinyl neodecanoate	1404																		
		5	NI	5	NR	3	NI	0	0	(3)	NI	(3)	3	3		2	F	3	45115-34-2
Vinyl neodecanoate	737																		
Vinyl toluenes	1409																		
		3	3	3	NR	3	NI	0	0	2	NI	2	2	1	NM	3	F	3	25013-15-4
Vinyltoluene	739																		
White spirit, low (15-20%)aromatic	1411																		
		(4)	NI	(4)	(R)	3	NI	(0)	(0)	(2)	NI	(2)	(1)	(2)	A	4	F	3	
White spirit, low (15-20%) aromatic	742																		
Wood lignin with sodium acetate/oxalate	2403																		
		NI	NI	(0)	NR	(0)	NI	0	(0)	(1)	NI	(1)	(1)	(1)		0	D	1	
Wood lignin with sodium acetate/oxalate	3638																		
Xylene (mixed isomers)	1408																		
		3	NI	3	NR	3	0	0	0	0	NI	0	2	2		3	FE	2	133-20-7
Xylenes	743																		
Xylenes/Ethyl benzene (10% or more) mixture	2269																		
		3	2	2	NR	3	1	(0)	(0)	(2)	NI	(2)	(2)	(2)		3	FE	2	
Xylenes/ethylbenzene (10% or more) mixture	2337																		
Xylenols (mixtures)	1422																		
		2	NI	2	R	3	NI	1	2	(3)	NI	(3)	3	3		2	Fp	3	1300-71-6
Xylenol	744																		
Yeast Extract Solution with Propylene Glycol (25% or less)	2396																		
		NI	0	0	R	0	NI	0	0	(1)	NI	(1)	0	1		1	D	1	8013-01-2
Stabilized Yeast Extract Solution	3631																		
Zinc alkaryl dithiophosphate (C7-C16) (LOA)	1977																		
		0	NI	0	NR	3	NI	0	0	(0)	NI	(0)	(0)	(0)		1	Fp	2	
Zinc alkaryl dithiophosphate (C7-C16)	745																		
Zinc alkenylcarboxamide (LOA)	2053																		
		NI	0	0	NR	0	NI	0	0	(1)	NI	(1)	1	(1)		1	Fp	2	
Zinc alkenyl carboxamide	746																		
Zinc alkyl dithiophosphate	1428																		
		5	NI	5	NR	3	NI	0	0	0	NI	0	2	2		1	S	2	
Zinc alkyl dithiophosphate (C3-C14)	747																		
Zinc bromide solutions	2227																		
		Inorg	4	4	Inorg	3	NI	1	(2)	(3)	NI	(3)	3B	3	Ss	0	D	3	
Zinc bromide solutions	2617																		
Zinc chloride	1425																		
		Inorg	4	4	Inorg	4	1	(1)	(1)	(3)	NI	(3)	(3)	(3)		0	D	3	7646-85-7
Drilling brines (containing zinc chloride)	307																		
Zinc chloride	1425																		
		Inorg	4	4	Inorg	4	1	(1)	(1)	(3)	NI	(3)	(3)	(3)		0	D	3	7646-85-7
Zinc chloride	2869																		

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ANNEX 5

PROVISIONAL AGENDA FOR THE SIXTY-FIRST SESSION OF THE GESAMP/EHS WORKING GROUP

1 Adoption of the agenda

2 Outcome of other bodies

3 Evaluation of new substances

4 Re-evaluation of substances and consideration of issues related to evaluations

5 Classification issues

6 Consolidation of existing data files

7 Communication and publication

8 Any other business

9 Consideration and adoption of the report