

SAFETY DATA SHEET

NO 1 LEMON UNIVERSAL CONCENTRATE

According to Regulation (EC) No. 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name NO 1 LEMON UNIVERSAL CONCENTRATE

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Detergent. For professional use only.

Uses advised against Not for direct contact with Food or Beverage stuffs. Not for oral consumption.

1.3. Details of the supplier of the safety data sheet

Supplier MERLIN CHEMICALS
UNIT 5, PASSFIELD MILL INDUSTRIAL PARK, LIPHOOK, HAMPSHIRE, GU30 7RR
+44 (0) 1428 751122
+44 (0) 1428 751133
technical@merlinchemicals .co.uk

1.4. Emergency telephone number

Emergency telephone Out of Office Hours Emergency Information:-
For accidents and spillages involving this product that pose a threat to the environment, or human health, or require immediate first aid advice call:- +44(0) 7050 265597.
Note:- This number will not accept order queries or calls dealing with equipment breakdowns.
UK Environment Agency 24hour Advisory Service 0800 807060. Irish Environmental Protection Agency 1890 335599.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Elicitation - EUH208

Environmental hazards Aquatic Chronic 3 - H412

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements H315 Causes skin irritation.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.
EUH208 Contains d-Limonene. May produce an allergic reaction.

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Precautionary statements	<p>P273 Avoid release to the environment.</p> <p>P280 Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P313 Get medical advice/attention.</p> <p>P332+P313 If skin irritation occurs: Get medical advice/attention.</p>
Contains	C9-11 ALCOHOL ETHOXYLATE WITH 6.5M ETHYLENE OXIDE, ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT, ALKYL DIMETHYL AMINE OXIDE, 1-PROPANAMINIUM, 3-AMINO-N-(CARBOXYMETHYL)-N,N-DIMETHYL-, N-C8-18 (EVEN NUMBERED) ACYL DERIVS., HYDROXIDES, INNER SALTS
Detergent labelling	5 - < 15% non-ionic surfactants,< 5% amphoteric surfactants,< 5% cationic surfactants,< 5% EDTA and salts thereof,Contains d-Limonene, 3,7-Dimethylocta-1,6-dien-3-ol, CITRAL, Geraniol, CITRONELLOL
Supplementary precautionary statements	<p>P404 Store in a closed container.</p> <p>P501 Dispose of contents/container in accordance with national regulations.</p>

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

C9-11 ALCOHOL ETHOXYLATE WITH 6.5M ETHYLENE OXIDE	10-30%
CAS number: 68439-46-3	
Classification	Classification (67/548/EEC or 1999/45/EC)
Acute Tox. 4 - H302	Xn; R22. Xi; R41
Eye Dam. 1 - H318	
ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT	1-5%
CAS number: 64-02-8	EC number: 200-573-9
	REACH registration number: 01-2119486762-27
Classification	Classification (67/548/EEC or 1999/45/EC)
Acute Tox. 4 - H302	Xn;R20,R22. Xi;R41.
Acute Tox. 4 - H332	
Eye Dam. 1 - H318	

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ALKYL DIMETHYL AMINE OXIDE 1-5%		
CAS number: 308062-28-4	EC number: 931-292-6	REACH registration number: 01-2119490061-47
M factor (Acute) = 1		
Classification	Classification (67/548/EEC or 1999/45/EC)	
Acute Tox. 4 - H302	Xn; R22. Xi; R38, R41. N; R50/53	
Skin Irrit. 2 - H315		
Eye Dam. 1 - H318		
Aquatic Acute 1 - H400		
Aquatic Chronic 2 - H411		
1-PROPANAMINIUM, 3-AMINO-N-(CARBOXYMETHYL)-N,N-DIMETHYL-, N-C8-18 (EVEN NUMBERED) ACYL DERIVS., HYDROXIDES, INNER SALTS 1-5%		
CAS number: —	EC number: 931-296-8	REACH registration number: 01-2119488533-30-0000
Classification	Classification (67/548/EEC or 1999/45/EC)	
Eye Dam. 1 - H318	Xi; R41. R52/53	
Aquatic Chronic 3 - H412		
ALKYL BENZYL DIMETHYL AMMONIUM CHLORIDE 1-5%		
CAS number: 68424-85-1	EC number: 270-325-2	
M factor (Acute) = 10		
Classification	Classification (67/548/EEC or 1999/45/EC)	
Acute Tox. 4 - H302	Xn;R21/22. C;R34. N;R50.	
Acute Tox. 4 - H312		
Skin Corr. 1B - H314		
Eye Dam. 1 - H318		
Aquatic Acute 1 - H400		
d-Limonene <1%		
CAS number: 5989-27-5	EC number: 227-813-5	REACH registration number: 01-2119529223-47-0000
M factor (Acute) = 1	M factor (Chronic) = 1	
Classification	Classification (67/548/EEC or 1999/45/EC)	
Flam. Liq. 3 - H226	Xn; R65. Xi; R38. N; R50/53. R10, R43	
Skin Irrit. 2 - H315		
Skin Sens. 1 - H317		
Asp. Tox. 1 - H304		
Aquatic Acute 1 - H400		
Aquatic Chronic 1 - H410		

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SODIUM HYDROXIDE		<1%
CAS number: 1310-73-2	EC number: 215-185-5	REACH registration number: 01-2119457892-27
Classification	Classification (67/548/EEC or 1999/45/EC)	
Met. Corr. 1 - H290	C;R35	
Skin Corr. 1A - H314		
Eye Dam. 1 - H318		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition comments To the best of our knowledge, all of the substances used in this product are being supported for the relevant application in REACH.

SECTION 4: First aid measures**4.1. Description of first aid measures**

General information	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Inhalation	Move affected person to fresh air. Get medical attention if any discomfort continues.
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing. In the event of any sensitisation symptoms developing, ensure further exposure is avoided.
Eye contact	Remove any contact lenses and open eyelids wide apart. Promptly wash eyes with plenty of water while lifting the eyelids. Continue to rinse for at least 15 minutes and get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

General information	Neat product will cause skin irritation and potentially permanent eye damage. Dilute product will result in less severe damage to the eyes, but contact should be treated as per neat chemical.
Inhalation	Unlikely route of exposure. Inhalation of sprayed droplets may result in soreness of the throat, mouth and nose.
Ingestion	Unlikely route of exposure without deliberate abuse. If neat chemical is ingested, irritation of the mouth, throat and GI tract may occur. If dilute chemical is ingested some soreness of the mouth, throat and GI tract may occur.
Skin contact	Causes skin irritation. Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. May cause sensitisation by skin contact.
Eye contact	May result in permanent eye damage.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor Contains d-limonene, may cause an allergic like skin reaction in sensitive individuals.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable extinguishing media The product is non-combustible. Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

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Specific hazards The product is non-combustible. When heated and in case of fire, irritating vapours/gases may be formed.

5.3. Advice for firefighters

Protective actions during firefighting Protective clothing and respiratory protection should be worn when tackling fires involving this product. Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Ensure adequate ventilation of the working area.

6.2. Environmental precautions

Environmental precautions Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body. Avoid or minimise the creation of any environmental contamination.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if safe to do so. Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable labelled containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections See sections 8, 12 & 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin and eyes. Ensure adequate ventilation of the working area.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store below 40°C.

7.3. Specific end use(s)

Specific end use(s) Detergent, refer to Product Information Sheet for full details.

Usage description This product is suitable for use in food preparation areas, but is not designed for direct food contact.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

SODIUM HYDROXIDE

Short-term exposure limit (15-minute): WEL 2 mg/m³

WEL = Workplace Exposure Limit

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Where an exposure level is quoted, a risk assessment should consider if there is a need to monitor the atmosphere of the working environment. Results should be compared against the WEL and/or DNEL information provided. The Long Term WEL refers to total exposure of a worker to a specific substance averaged out over an 8 hour period.

The Short Term WEL refers to a single exposure of a worker to a specific substance over a 15 minute period.

If the Short Term WEL is exceeded and no Long Term Limit is set, further exposure during the working shift is not permitted. Further controls should be implemented to ensure that future exposure to the substance is reduced below the levels set before the activity is repeated/continued. Where no Short Term WEL exists, guidance from the HSE is to use a value of three times the Long Term WEL.

The WEL limits are laid down in the EH40 list as supplied by the HSE. This is taken from the Chemical Agents Directive (98/24/EC). Where a worker is exposed to levels approaching a limit, further exposure control measures should be considered to reduce exposure to the substance. DNEL and/or PNEC information is supplied by manufacturers of substances in accordance with REACH legislation (Regulation (EC) No 1907/2006), and is used to provide suitable risk reduction measures to limit exposure of the user of the substance to a non hazardous level. If the measured level of exposure by a route divided by the DNEL for the route is greater than 1, then further exposure controls should be implemented as described in section 8.2. Where new information becomes available under REACH, this will be passed on as revisions to the Safety Data Sheet.

ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT (CAS: 64-02-8)

DNEL Professional - Inhalation; Long term systemic effects: 2.5 mg/m³
Professional - Inhalation; Long term local effects: 2.5 mg/m³
Professional - Inhalation; Short term systemic effects: 2.5 mg/m³
Professional - Inhalation; Short term local effects: 2.5 mg/m³

PNEC - Fresh water; 2.2 mg/l
- Marine water; 0.22 mg/l
- Intermittent release; 1.2 mg/l
- Soil; 0.72 mg/kg
- STP; 43 mg/kg

ALKYL DIMETHYL AMINE OXIDE (CAS: 308062-28-4)

DNEL Professional - Dermal; Long term systemic effects: 11 mg/kg/day
Professional - Inhalation; Long term systemic effects: 15.5 mg/m³ 8h
Professional - Dermal; Long term local effects: 0.27 %
General population - Dermal; Long term systemic effects: 5.5 mg/kg/day
General population - Inhalation; Long term systemic effects: 3.8 mg/m³
General population - Oral; Long term systemic effects: 0.44 mg/kg/day

PNEC - Fresh water; 0.0335 mg/l
- Marine water; 0.00335 mg/l
- Intermittent release; 0.0335 mg/l
- Sediment (Freshwater); 1.02 mg/kg
- Sediment (Marinewater); 24 mg/kg
- Soil; 1.02 mg/kg
- STP; 24 mg/kg

SODIUM HYDROXIDE (CAS: 1310-73-2)

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DNEL Industry - Inhalation; Long term local effects: 1.0 mg/m³
 DNEL data for Professional users is not yet available, but it is assumed to be the same as for Industrial users.
 Industry - Dermal; Short term local effects: 2%

PNEC No information is available for PNEC data for Sodium Hydroxide

MONOPROPYLENE GLYCOL (CAS: 57-55-6)

DNEL Professional - Inhalation; Long term systemic effects: 186 mg/m³
 Professional - Inhalation; Long term local effects: 10 mg/m³

PNEC

- Fresh water; 206 mg/l
- Marine water; 26 mg/l
- Sediment (Freshwater); 572 mg/l
- Sediment (Marinewater); 57.2 mg/l
- Soil; 50 mg/kg dwt
- STP; 20000 mg/l

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Personal protection

The PPE indicated above is not a COSHH assessment. It represents PPE that should be considered during the manufacture, distribution, use and final disposal stages of this product's life cycle. It is the responsibility of employers to conduct a COSHH/risk assessment to determine appropriate PPE levels. The information given below should be used to support this assessment. Where possible replace manual processes with automated or closed processes to minimise contact with the product.

Eye/face protection

The following protection should be worn: Chemical splash goggles. Refer to EN Standard 166 to select appropriate level of protection.

Hand protection

Rubber (natural, latex). Neoprene. Polyvinyl chloride (PVC). Refer to Standard EN 374.

Other skin and body protection

Provide eyewash station. Wear suitable protective clothing as protection against splashing or contamination. Reference to EN 13832 and EN 943 is useful when selecting footwear and clothing.

Hygiene measures

Promptly remove non-impervious clothing that has become contaminated, provided it is not adhered to the skin. Wash contaminated clothing before reuse. Provide eyewash station and safety shower.

Respiratory protection

No specific recommendation made, but respiratory protection must be used if the general level exceeds the Workplace Exposure Limit.

Environmental exposure controls

Do not allow the substance to contaminate surface water/ground water. See points 6, 12 & 13.

General Health and Safety Measures.

The above requirements refer to the neat chemical. In-use solutions may have a lower classification, however, a full risk assessment should be carried out before handling any chemical(s). Risk assessments should refer to COSHH and any other relevant legislation or industry specific guidelines governing the use of chemicals.

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SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Yellow.
Odour	Citrus.
Odour threshold	Not applicable.
pH	pH (concentrated solution): 10 - 11
Melting point	Not applicable.
Initial boiling point and range	Not applicable.
Flash point	Not applicable. Contains no Flammable Components
Evaporation rate	Not applicable.
Evaporation factor	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Other flammability	Not applicable.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	1.02 - 1.04
Bulk density	Not applicable.
Solubility(ies)	Soluble in water.
Partition coefficient	Not technically practical for mixtures.
Auto-ignition temperature	Not applicable.
Decomposition Temperature	Not applicable.
Viscosity	Not determined.
Explosive properties	Not applicable.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not applicable. Contains no Oxidising Components.

9.2. Other information

Refractive index	Not applicable.
Particle size	Not applicable.
Molecular weight	Not applicable.
Volatility	Not applicable.
Saturation concentration	Not applicable.
Critical temperature	Not applicable.

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Volatile organic compound	Not applicable.
Explosive Properties	Not Classified as Explosive
Storage Temperature Range	0 - 40°C

SECTION 10: Stability and reactivity**10.1. Reactivity**

Reactivity	Not expected to react when correctly stored and used. Mixing with other chemicals may produce unexpected reactions.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended. - See note 10.6.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Refer to section 10.1. Do not mix with Hypochlorite based chemicals, this could result in a dangerous heating of the solution.
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10.4. Conditions to avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time.
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10.5. Incompatible materials

Materials to avoid	Strong acids. Bleach.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Does not decompose when used and stored as recommended. - See section 10.5.
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SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity - oral**

ATE oral (mg/kg)	2,720.39728424
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Acute toxicity - dermal

ATE dermal (mg/kg)	53,608.24742268
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Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l)	40.6526099
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General information	See section 4.2.
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Inhalation	Unlikely route of exposure. Inhalation of sprayed droplets may result in soreness of the throat, mouth and nose. - See section 4.2.
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Ingestion	May cause irritation to mouth, throat and GI tract.
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Skin contact	Irritating to skin. May cause sensitisation by skin contact.
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Eye contact	Risk of serious damage to eyes. May cause permanent eye injury.
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SECTION 12: Ecological Information

Ecotoxicity	Harmful to aquatic life with long lasting effects.
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12.1. Toxicity

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12.2. Persistence and degradability

Persistence and degradability The surfactant(s) used in this preparation complies (comply) with the biodegradability criteria as laid down in the European Detergents Regulation No 648/2004 as amended.

12.3. Bioaccumulative potential

Bioaccumulative potential Not expected to bioaccumulate.

Partition coefficient Not technically practical for mixtures.

12.4. Mobility in soil

Mobility The product contains substances which are water soluble and may spread in water systems.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information When handling waste, the safety precautions applying to handling of the product should be considered. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. Do not mix with other chemicals.

Disposal methods Small volumes of use solution can be disposed of to sewers. Dispose of waste product or used containers in accordance with local regulations

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation European Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures.
This replaces Directive 67/548/EEC - Classification, Packaging and Labelling of Dangerous Substances and Regulation (EC) No. 453/2010 relating to the Classification, Packaging and Labelling of Dangerous Preparations. Also considered is the REACH Regulation (EC) No.1907/2006.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet (EC) No. 1272/2008 : EU Regulation on Classification, Labelling and Packaging of Substances and Mixtures.
NPIS - National Poisons Information Service.
vPvB - Very Persistent, Very bioaccumulative.
PBT - Persistent, Bioaccumulative & Toxic.
REACH - Registration, Evaluation, Authorisation & restriction of CHemicals (Regulation EC 1907/2006).
DNEL - Derived No Effect Limit.
PNEC - Predicted No Effect Concentration.
COSHH - Control of Substances Hazardous to Health.
Industry - Refers in section 8 to application of the substance in an industrial process.
Professional - Refers in section 8 to application/use of the preparation/product in a skilled trade premises.

General information This document is a Safety Data Sheet, NOT a CoSHH assessment. It is the customer's responsibility to conduct a full CoSHH assessment, taking into account the information held within this document along with other local factors considered in a risk assessment. The Risk and Hazard statements listed below are the full text of abbreviations used in this document. They are not the final classification, for this refer to section 2.

Revision comments Review in line with CLP Regulation.

Revision date 01/07/2014

SDS number 20982

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Hazard statements in full

H226 Flammable liquid and vapour.
H290 May be corrosive to metals.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
EUH208 Contains d-Limonene. May produce an allergic reaction.

REACH extended MSDS comments

REACH requires that persons handling chemicals should take the necessary risk management measures, in accordance with assessments from manufacturers and importers of chemical substances. The relevant recommendations must be passed along the supply chain. These assessments are generally reported in Exposure Scenarios. Where Exposure Scenarios have been provided for substances used in this product, the relevant information is incorporated into the safety data sheet.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.