SAFETY DATA SHEET

Permafoam

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) No 453/2010

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

1.1. Product identifier

Product name Permafoam

Product number 285-1

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

Identified uses Car maintenance product. - Cleaning agent.

Uses advised against For professional use only. This product is not recommended for any industrial, professional or consumer use other than the Identified uses above.

1.3. Details of the supplier of the safety data sheet

Supplier

Autosmart International Ltd
Lynn Lane,
Shenstone, nr Lichfield
Staffordshire. WS14 0DH
England
www.autosmartinternational.com
Tel: +44 (0) 1543 481616 (09:00 - 17:00)
Fax: +44 (0) 1543 481549 (09:00 - 17:00)
info@autosmartinternational.com

Contact person Mr. Russell Butler

1.4. Emergency telephone number

Emergency telephone Mob: +44 (0) 7808 971321 (24hrs)Tel: +44 (0) 1543 481616 (09:00 - 17:00)Fax: +44 (0) 1543 481549 (09:00 - 17:00)If you urgently need medical help or advice but it's not a life-threatening situation, call 111 free from any phone to speak to an NHS adviser. The 24-hour NHS 111 service can give you healthcare advice or direct you to the local service that can help you best.If NHS 111 does not yet cover your area, you can call NHS Direct in England or Wales on 08 45 46 47* or NHS 24 in Scotland on 0845 24 24 24* (UK Only) The NHS 111 service will also be available via the harmonised European number for medical advice 116 117* Calls to 084 numbers are charged at a higher rate than standard calls on BT's most popular call plan (BT Unlimited Weekend). Mobile and other providers costs will vary and you should check the costs of calls with your provider

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards
Met. Corr. 1 - H290

Health hazards
Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards
Not Classified

.

Classification (67/548/EEC or 1999/45/EC)
Xi;R36/38. R43.

2.2. Label elements

Pictogram

Permafoam


Signal word Warning

Hazard statements

H290 May be corrosive to metals.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

Precautionary statements

P261 Avoid breathing vapour/spray.
P264 Wash contaminated skin thoroughly after handling.
P280 Wear protective gloves, eye and face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P362+P364 Take off contaminated clothing and wash it before reuse.

Contains methyl trimethyl-3-[(1-oxododecyl)amino]propylammonium sulphate

Detergent labelling < 5% anionic surfactants, < 5% cationic surfactants, < 5% NTA (nitrilotriacetic acid) and salts thereof

Supplementary precautionary statements

P272 Contaminated work clothing should not be allowed out of the workplace.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P390 Absorb spillage to prevent material damage.
P501 Dispose of contents/container in accordance with national regulations.

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

2-(2-BUTOXYETHOXY)ETHANOL **2-5%**

CAS number: 112-34-5 **EC number:** 203-961-6 **REACH registration number:** 01-2119475104-44-XXXX

Substance with a Community workplace exposure limit.

Classification	Classification (67/548/EEC or 1999/45/EC)
Eye Irrit. 2 - H319	Xi;R36

Alcohols, C12-C14, ethoxylated, sulfates, sodium salts **2-5%**

CAS number: 68891-38-3 **EC number:** 500-234-8 **REACH registration number:** 01-2119488639-16-xxxx

Classification	Classification (67/548/EEC or 1999/45/EC)
Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	Xi;R38,R41.

methyl trimethyl-3-[(1-oxododecyl)amino]propylammonium sulphate **1-2%**

CAS number: 10595-49-0 **EC number:** 234-204-8 **REACH registration number:** 01-2119976277-23-XXXX

M factor (Acute) = 10

Classification	Classification (67/548/EEC or 1999/45/EC)
Acute Tox. 4 - H302 Eye Irrit. 2 - H319 Skin Sens. 1A - H317 Aquatic Acute 1 - H400 Aquatic Chronic 2 - H411	Xn;R22. Xi;R36. R43.

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Trisodium Nitrilotriacetate	1-2%
CAS number: 5064-31-3 **EC number:** 225-768-6 **REACH registration number:** 01-2119519239-36-xxxx	

Classification	Classification (67/548/EEC or 1999/45/EC)
Acute Tox. 4 - H302 Eye Irrit. 2 - H319 Carc. 2 - H351	Carc. Cat. 3;R40 Xn;R22 Xi;R36

2-BUTOXYETHANOL	1-2%
CAS number: 111-76-2 **EC number:** 203-905-0 **REACH registration number:** 01-2119475108-36-xxxx Substance with a Community workplace exposure limit.	

Classification	Classification (67/548/EEC or 1999/45/EC)
Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	Xn;R20/21/22 Xi;R36/38

SODIUM HYDROXIDE	1-2%
CAS number: 1310-73-2 **EC number:** 215-185-5 **REACH registration number:** 01-2119457892-27-xxxx Substance with a Community workplace exposure limit.	

Classification	Classification (67/548/EEC or 1999/45/EC)
Met. Corr. 1 - H290 Skin Corr. 1A - H314 Eye Dam. 1 - H318	C;R35

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
Treat symptomatically.

Inhalation
Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

Ingestion
Remove affected person from source of contamination. Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Keep affected person under observation. Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues. Consult a physician for specific advice.

Skin contact
Remove affected person from source of contamination. Remove contaminated clothing. Rinse immediately with plenty of water. Use suitable lotion to moisturise skin. Get medical attention if irritation persists after washing.

Eye contact
Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel.

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

General information
The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation
Coughing, chest tightness, feeling of chest pressure.

Ingestion
May cause discomfort if swallowed. May cause stomach pain or vomiting.

Skin contact
Prolonged contact may cause redness, irritation and dry skin. Mild dermatitis, allergic skin rash.

Eye contact

May cause blurred vision and serious eye damage.

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

Notes for the doctor

No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

The product is not flammable. The product is non-combustible. Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards

The product is non-combustible. Irritating gases or vapours. Thermal decomposition or combustion products may include the following substances: Acrid smoke or fumes. Oxides of the following substances: Carbon. No unusual fire or explosion hazards noted.

Hazardous combustion products

Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting

Avoid breathing fire gases or vapours. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters

Wear chemical protective suit. Use air-supplied respirator, gloves and protective goggles. Use protective equipment appropriate for surrounding materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

For personal protection, see Section 8.

6.2. Environmental precautions

Environmental precautions

Do not discharge into drains or watercourses or onto the ground. To prevent release, place container with damaged side up. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body. Contain spillage with sand, earth or other suitable non-combustible material.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Stop leak if possible without risk. Large Spillages: Dike far ahead of larger spills for later disposal. Absorb in vermiculite, dry sand or earth and place into containers. Avoid the spillage or runoff entering drains, sewers or watercourses. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Flush contaminated area with plenty of water. Take care as floors and other surfaces may become slippery. Flush contaminated area with plenty of water. The requirements of the local water authority must be complied with if contaminated water is flushed directly to the sewer. Small Spillages: Flush away spillage with plenty of water. Wash thoroughly after dealing with a spillage. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible.

6.4. Reference to other sections

Reference to other sections

For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Read and follow manufacturer's recommendations. Avoid spilling. Avoid contact with skin and eyes. Good personal hygiene procedures should be implemented. Follow instructions and ensure correct dilution of this product before use.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

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Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep only in the original container. Keep above the chemical's freezing point to avoid rupturing the container. Store at temperatures not exceeding «Value in °C»°C/«Value in °F»°F.

Storage class

Chemical storage.

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

2-(2-BUTOXYETHOXY)ETHANOL

Long-term exposure limit (8-hour TWA): WEL 10 ppm 67.5 mg/m3
Short-term exposure limit (15-minute): WEL 15 ppm 101.2 mg/m3

2-BUTOXYETHANOL

Long-term exposure limit (8-hour TWA): WEL 25 ppm 123 mg/m3
Short-term exposure limit (15-minute): WEL 50 ppm 246 mg/m3
Sk

SODIUM HYDROXIDE

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

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

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2-(2-BUTOXYETHOXY)ETHANOL (CAS: 112-34-5)

DNEL	Industry - Inhalation; : 101.2 mg/m³ Industry - Dermal; : 20 mg/kg/day Consumer - Inhalation; : mg/m³ Consumer - Dermal; : 10 mg/kg/day Consumer - Oral; : 1.25 mg/kg/day
PNEC	- Fresh water; 1 mg/l - Marine water; 0.1 mg/l - Sediment (Freshwater); 4 mg/kg - Sediment (Marinewater); 0.4 mg/kg - Soil; 0.4 mg/kg

Alcohols, C12-C14, ethoxylated, sulfates, sodium salts (CAS: 68891-38-3)

Ingredient comments

No exposure limits known for ingredient(s).

DNEL	Professional - Oral; : 2750 mg/kg/day
PNEC	- Fresh water; 0.240 mg/l

methyl trimethyl-3-[(1-oxododecyl)amino]propylammonium sulphate (CAS: 10595-49-0)

Ingredient comments

No exposure limits known for ingredient(s).

Trisodium Nitrilotriacetate (CAS: 5064-31-3)

Ingredient comments

No exposure limits known for ingredient(s).

DNEL	Industry - Inhalation; Short term : 5.25 mg/m3 Industry - Inhalation; Long term : 3.5 mg/m3 Consumer - Inhalation; Short term : 1.75 mg/m3 Consumer - Inhalation; Long term : 0.5 mg/kg/day
PNEC	- Fresh water; 0.93 mg/l - Marine water; 0.093 mg/l - STP; 540 mg/l - Sediment; 3.64 mg/kg - Soil; 0.182 mg/kg

2-BUTOXYETHANOL (CAS: 111-76-2)

Ingredient comments

Due to the hazardous nature of ingredients, exposure should be minimal.

DNEL	Industry - Dermal; Short term : 89 mg/kg/day Industry - Inhalation; Short term : 246 mg/m3 Industry - Dermal; Long term : 75 mg/kg/day Industry - Inhalation; Long term : 98 mg/m3 Consumer - Dermal; Short term : 44.5 mg/kg/day Consumer - Inhalation; Short term : 123 mg/m3 Consumer - Oral; Short term : 13.4 mg/kg/day Consumer - Dermal; Long term : 38 mg/kg/day Consumer - Inhalation; Long term : 49 mg/m3
PNEC	- Fresh water; 8.8 mg/l - Marine water; 0.88 mg/l - Sediment (Freshwater); 8.14 mg/kg - Soil; 2.8 mg/kg - STP; 463 mg/l

SODIUM HYDROXIDE (CAS: 1310-73-2)

DNEL	Consumer - Inhalation; Short term : 1 mg/m3 Industry - Inhalation; Short term : 1 mg/m3 Industry - Inhalation; Long term : 1 mg/m3

8.2. Exposure controls

Protective equipment

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Appropriate engineering controls
No specific ventilation requirements. This product must not be handled in a confined space without adequate ventilation.

Eye/face protection
Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.

Hand protection
Wear protective gloves made of the following material: Rubber (natural, latex). Polyvinyl chloride (PVC). Nitrile rubber. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended. Use thin cotton gloves inside the rubber gloves if allergy risk.

Other skin and body protection
Provide eyewash station.

Hygiene measures
Provide eyewash station. Do not smoke in work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

Respiratory protection
No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Seek advice from supervisor on the company's respiratory protection standards. If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Combination filter, type A2/P3.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance
Liquid.

Colour
Light (or pale). Straw.

Odour
Characteristic.

Odour threshold
Not available. Not available.

pH
pH (concentrated solution): ~ 12.8 pH (diluted solution): ~ 11.2 @ 1%

Melting point
~ 0°C

Initial boiling point and range
~100°C @°C @ 760 mm Hg

Flash point
Not applicable.

Evaporation rate
Not available.

Upper/lower flammability or explosive limits
Not applicable. : :

Vapour pressure
Not applicable.

Vapour density
Not applicable.

Relative density
~1.025 @ (20°C)°C

Solubility(ies)
Soluble in water. Miscible with water.

Partition coefficient
Not available.

Auto-ignition temperature
Not applicable.

Decomposition Temperature
Not available.

Viscosity
~ 1 cSt @ °C

Oxidising properties
Does not meet the criteria for classification as oxidising.

Comments
Information declared as "Not available" or "Not applicable" is not considered to be relevant to the implementation of the proper control measures.

9.2. Other information

Volatile organic compound
This product contains a maximum VOC content of 0 g/litre.

SECTION 10: Stability and reactivity

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability
No particular stability concerns. Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Not applicable. Will not polymerise.

10.4. Conditions to avoid

There are no known conditions that are likely to result in a hazardous situation. Avoid excessive heat for prolonged periods of time. Avoid freezing.

10.5. Incompatible materials

Materials to avoid
No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products

Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Other health effects
There is no evidence that the product can cause cancer. IARC Int. Agency for Cancer Research. IARC Not Listed. OSHA Not Regulated. NTP Not Listed.

Acute toxicity - oral

ATE oral (mg/kg)
14,323.49052446

Acute toxicity - dermal

ATE dermal (mg/kg)
98214.28571429

Acute toxicity - inhalation

ATE inhalation (vapours mg/l)
982.14285714

Skin corrosion/irritation

Human skin model test
Scientifically unjustified.

Extreme pH
= 11.5 Classification based on Conventional Method, and In Vitro Approaches - Corrosive or Irritant by measuring pH and Acid/Alkali Reserve. Irritating.

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Skin sensitisation
Not sensitising.

General information
This product has low toxicity. Only large quantities are likely to have adverse effects on human health.

Inhalation
May cause respiratory system irritation.

Ingestion
May cause discomfort if swallowed.

Skin contact
May cause sensitisation by skin contact. May cause allergic contact eczema. Prolonged contact may cause dryness of the skin. May cause sensitisation or allergic reactions in sensitive individuals.

Eye contact
Irritating to eyes. Risk of serious damage to eyes.

Acute and chronic health hazards
No specific long-term effects known. No specific acute or chronic health impact noted, but this chemical may still have adverse impact on human health, either in general or on certain individuals with pre-existing or latent health problems.

Route of entry
Ingestion. Skin and/or eye contact

Medical symptoms
No specific symptoms noted, but this chemical may still have adverse health impact, either in general or on certain individuals.

Medical considerations
Skin disorders and allergies.

Toxicological information on ingredients.

2-(2-BUTOXYETHOXY)ETHANOL

Other health effects
There is no evidence that the product can cause cancer.

Alcohols, C12-C14, ethoxylated, sulfates, sodium salts

Acute toxicity - oral

Acute toxicity oral (LD50 mg/kg)
2,001.0

Species
Rat

ATE oral (mg/kg)
2,001.0

Acute toxicity - dermal

Acute toxicity dermal (LD50 mg/kg)
2001.0

Species
Rat

ATE dermal (mg/kg)
2001.0

Skin sensitisation
Not sensitising.

methyl trimethyl-3-[(1-oxododecyl)amino]propylammonium sulphate

Other health effects
There is no evidence that the product can cause cancer.

Skin sensitisation
Sensitising.

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Trisodium Nitrilotriacetate

Toxicological effects

Nitrilotriacetic acid, trisodium salt (NTA) has caused kidney tumours in rats and mice when administered orally in high concentrations. The tumours are based on organ damage that can only occur when extremely high threshold limit concentrations, as compared with possible human exposure, are exceeded. In view of the potential degree of exposure, there should be no cancer risk to humans.

Other health effects

Possible cancer hazard (contains material which) may cause cancer based on animal data.

Carcinogenicity

Limited evidence of a carcinogenic effect.

2-BUTOXYETHANOL

Other health effects

ACGIH Carcinogen List. Possible cancer hazard (contains material which) may cause cancer based on animal data. Carcinogen Category 3.

Acute toxicity - oral

Acute toxicity oral (LD50 mg/kg)

1,300.0

Species

Rat

ATE oral (mg/kg)

1,300.0

Acute toxicity - dermal

Acute toxicity dermal (LD50 mg/kg)

2270.0

Species

Rat

ATE dermal (mg/kg)

1100

Acute toxicity - inhalation

ATE inhalation (vapours mg/l)

11.0

Skin sensitisation

Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro

Gene mutation:: Negative. This substance has no evidence of mutagenic properties.

Reproductive toxicity

Reproductive toxicity - fertility

Fertility: - NOAEL 720 mg/kg, , Mouse

Reproductive toxicity - development

Developmental toxicity: - NOAEL: 100 mg/kg, , Rat

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SODIUM HYDROXIDE

Other health effects
There is no evidence that the product can cause cancer.

Acute toxicity - oral

Acute toxicity oral (LD50 mg/kg)
2,000

Species
Rat

Specific target organ toxicity - single exposure

STOT - single exposure
Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure
Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard
Not anticipated to present an aspiration hazard, based on chemical structure.

Skin contact
Not a skin sensitiser.

Route of entry
Skin absorption Ingestion. Skin and/or eye contact

Target organs
No specific target organs known.

SECTION 12: Ecological Information

Ecotoxicity
The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment. The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms. The product is not expected to be hazardous to wastewater treatment processes. The product does not contain organic complexing agents with a DOC level of degradation of < 80% after 28 days. The product does not contain organically bound halogen.

Ecological information on ingredients.

2-(2-BUTOXYETHOXY)ETHANOL

Ecotoxicity
The product is not expected to be toxic to aquatic organisms.

Alcohols, C12-C14, ethoxylated, sulfates, sodium salts

Ecotoxicity
The product is not expected to be hazardous to the environment.

2-BUTOXYETHANOL

Ecotoxicity
Not regarded as dangerous for the environment.

SODIUM HYDROXIDE

Ecotoxicity
The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.

12.1. Toxicity

Acute toxicity - fish
Not determined.

Acute toxicity - aquatic invertebrates
Not determined.

Acute toxicity - aquatic plants
Not determined.

Acute toxicity - microorganisms

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Not determined.

Acute toxicity - terrestrial
Not determined.

Ecological information on ingredients.

Alcohols, C12-C14, ethoxylated, sulfates, sodium salts

Acute toxicity - fish
LC50, ~: ~ 7.1 mg/l,

Acute toxicity - aquatic invertebrates
EC , ~: ~ 1 - 10 mg/l, Daphnia magna

Acute toxicity - aquatic plants
EC , ~: ~ 10 - 100 mg/l, Freshwater algae

methyl trimethyl-3-[(1-oxododecyl)amino]propylammonium sulphate

Acute aquatic toxicity

LE(C)
0.01 < L(E)C50 ≤ 0.1

M factor (Acute)
10

Trisodium Nitrilotriacetate

Acute toxicity - fish
LC , 96 hours: 114-470 mg/l, Fish

Acute toxicity - aquatic invertebrates
EC , 48 hours: 560-1,000 mg/l, Daphnia magna

Acute toxicity - aquatic plants
IC , 72 hours: 180-320 mg/l, Algae

2-BUTOXYETHANOL

Acute toxicity - fish
LC50, 96 hours: > 100 mg/l, Lepomis macrochirus (Bluegill)

Acute toxicity - aquatic invertebrates
EC , 48 hours: 1550 mg/l, Daphnia magna

Acute toxicity - aquatic plants
EC , >: > 100 mg/l,

Acute toxicity - microorganisms
EC , >: > 1000 mg/l,

Chronic toxicity - fish early life stage
NOEC, 21 days: > 100 mg/l,

Chronic toxicity - aquatic invertebrates
NOEC, 21 days: 100 mg/l, Daphnia magna

SODIUM HYDROXIDE

Acute toxicity - fish
LC50, 48 hours: ~ 189 mg/l, Leuciscus idus (Golden orfe) LC , 96 hours: 125 mg/l, Fish

Acute toxicity - aquatic invertebrates
EC , 48 hours: > 100 mg/l, Daphnia magna EC , 48 hours: 40-240 mg/l, Daphnia magna

Acute toxicity - aquatic plants
Not known.

12.2. Persistence and degradability

Persistence and degradability
The product is biodegradable. The surfactant(s) contained in this product complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them at their direct request, or at the request of a detergent manufacturer. The product is biodegradable but it must not be discharged into drains without permission from the authorities.

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Ecological information on ingredients.

2-(2-BUTOXYETHOXY)ETHANOL

Persistence and degradability
The product is biodegradable.

Alcohols, C12-C14, ethoxylated, sulfates, sodium salts

Persistence and degradability
The product is biodegradable.

methyl trimethyl-3-[(1-oxododecyl)amino]propylammonium sulphate

Persistence and degradability
The product is readily biodegradable.

Trisodium Nitrilotriacetate

Persistence and degradability
The product is biodegradable.

2-BUTOXYETHANOL

Persistence and degradability
The product is biodegradable.

Biodegradation
water - Degradation (%) 90.4: 28 days

SODIUM HYDROXIDE

Persistence and degradability
The product is biodegradable.

Stability (hydrolysis)
Not applicable.

Biological oxygen demand
~ 0 g O2/g substance

12.3. Bioaccumulative potential

The product does not contain any substances expected to be bioaccumulating.

Partition coefficient
Not available.

Ecological information on ingredients.

2-(2-BUTOXYETHOXY)ETHANOL

The product does not contain any substances expected to be bioaccumulating.

Alcohols, C12-C14, ethoxylated, sulfates, sodium salts

The product does not contain any substances expected to be bioaccumulating.

methyl trimethyl-3-[(1-oxododecyl)amino]propylammonium sulphate

The product does not contain any substances expected to be bioaccumulating.

Trisodium Nitrilotriacetate

The product does not contain any substances expected to be bioaccumulating.

2-BUTOXYETHANOL

The product is not bioaccumulating.

Partition coefficient
: 0.81

SODIUM HYDROXIDE

The product is not bioaccumulating.

12.4. Mobility in soil

Mobility
The product is soluble in water.

Permafoam

Ecological information on ingredients.

Alcohols, C12-C14, ethoxylated, sulfates, sodium salts

Mobility
The product is soluble in water.

methyl trimethyl-3-[(1-oxododecyl)amino]propylammonium sulphate

Mobility
The product is soluble in water.

Trisodium Nitrilotriacetate

Mobility
The product is soluble in water.

2-BUTOXYETHANOL

Mobility
The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

Adsorption/desorption coefficient
Soil - Koc: ~ 67 @ °C

Henry's law constant
0.000016 atm m3/mol @ °C

Surface tension
65 mN/m @ °C

SODIUM HYDROXIDE

Mobility
The product is soluble in water.

Henry's law constant
The product contains mainly inorganic substances which are not biodegradable.

12.5. Results of PBT and vPvB assessment

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

Ecological information on ingredients.

Alcohols, C12-C14, ethoxylated, sulfates, sodium salts

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

Trisodium Nitrilotriacetate

This substance is not classified as PBT or vPvB according to current EU criteria.

2-BUTOXYETHANOL

This substance is not classified as PBT or vPvB according to current EU criteria.

SODIUM HYDROXIDE

This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Not applicable.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information
The packaging must be empty (drop-free when inverted).

Disposal methods
Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Discharge of small quantities to the sewer with plenty of water may be permitted. The requirements of the local water authority must be complied with if contaminated water is flushed directly to the sewer. Larger quantities should be treated in a suitable plant or disposed of via a licensed waste disposal contractor. Packaging: Reuse or recycle products wherever possible.

SECTION 14: Transport information

14.1. UN number

Permafoam

UN No. (ADR/RID)	1824
UN No. (IMDG)	1824
UN No. (ICAO)	1824

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	SODIUM HYDROXIDE SOLUTION
Proper shipping name (IMDG)	SODIUM HYDROXIDE SOLUTION
Proper shipping name (ICAO)	SODIUM HYDROXIDE SOLUTION
Proper shipping name (ADN)	SODIUM HYDROXIDE SOLUTION

14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID subsidiary risk	
ADR/RID label	8
IMDG class	8
IMDG subsidiary risk	
ICAO class/division	8
ICAO subsidiary risk	

Transport labels

14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

IMDG Code segregation group	18. Alkalis
EmS	F-A, S-B
Emergency Action Code	2W
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

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

Not applicable.

SECTION 15: Regulatory information

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

National regulations

Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments.

EU legislation

Dangerous Preparations Directive 1999/45/EC. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Commission Directive 2000/39/EC of 8 June 2000 establishing a first

list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work (as amended).

Guidance

Workplace Exposure Limits EH40. Safety Data Sheets for Substances and Preparations.

Water hazard classification

WGK 3

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

General information

Only trained personnel should use this material. This product has been manufactured under ISO 9001 and ISO 14001 Quality and Environmental Management Systems.

Revision comments

This is first issue. NOTE: Lines within the margin indicate significant changes from the previous revision.

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Revision date	11/11/2014
Revision	2
SDS status	Temporarily approved for use for 3 months.

Risk phrases in full

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R22 Harmful if swallowed.
R35 Causes severe burns.
R36 Irritating to eyes.
R36/38 Irritating to eyes and skin.
R38 Irritating to skin.
R40 Limited evidence of a carcinogenic effect.
R41 Risk of serious damage to eyes.
R43 May cause sensitisation by skin contact.

Hazard statements in full

H290 May be corrosive to metals.
H302 Harmful if swallowed.
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.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H351 Suspected of causing cancer if swallowed.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.