



Est. 1965

SAFETY DATA SHEET

Alloy Brite

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

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

1.1. Product identifier

Product name Alloy Brite

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

Identified uses Alloy Wheel Cleaner

Uses advised against Use only for intended applications.

1.3. Details of the supplier of the safety data sheet

Supplier A-Chem Limited
Dunsford Road,
Meadow Lane Industrial Estate,
Alfreton, Derbyshire, DE55 7RH
Tel: +44 (0)1773 833881
Fax: +44 (0)1773 830616
info@achem.co.uk

1.4. Emergency telephone number

Emergency telephone As Above - Opening Hours 9 am - 5 pm (Monday - Friday)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Corr. 1 - H314 Eye Dam. 1 - H318

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms



Signal word Danger

Hazard statements H314 Causes severe skin burns and eye damage.

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Precautionary statements	<p>P260 Do not breathe vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</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>P405 Store locked up.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
Contains	tetrasodium ethylene diamine tetraacetate, Alkyl Amidopropyl Betaine, Sodium Hydroxide, 2-Butoxyethanol
Detergent labelling	5 - < 15% EDTA and salts thereof, < 5% amphoteric surfactants
Supplementary precautionary statements	<p>P310 Immediately call a POISON CENTER/ doctor.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P363 Wash contaminated clothing before reuse.</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

tetrasodium ethylene diamine tetraacetate		5-10%
CAS number: 64-02-8	EC number: 200-573-9	REACH registration number: 01-2119486762-27-XXXX
Classification		
Acute Tox. 4 - H302		
Acute Tox. 4 - H332		
Eye Dam. 1 - H318		
STOT RE 2 - H373		
Alkyl Amidopropyl Betaine		1-5%
CAS number: 147170-44-3	EC number: 931-296-8	REACH registration number: 01-2119489410-39-XXXX
Classification		
Eye Dam. 1 - H318		
Aquatic Chronic 3 - H412		
Sodium Hydroxide		1-5%
CAS number: 1310-73-2	EC number: 215-185-5	REACH registration number: 01-2119457892-27-XXXX
Classification		
Met. Corr. 1 - H290		
Skin Corr. 1A - H314		
Eye Dam. 1 - H318		

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2-Butoxyethanol	1-5%
CAS number: 111-76-2	EC number: 203-905-0
Classification	
Acute Tox. 4 - H302	
Acute Tox. 4 - H312	
Acute Tox. 4 - H332	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Get medical attention immediately. Show this Safety Data Sheet to the medical personnel. Chemical burns must be treated by a physician.
Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place.
Ingestion	Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.
Skin contact	It is important to remove the substance from the skin immediately. Take off immediately all contaminated clothing. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes and get medical attention. Chemical burns must be treated by a physician.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue. If it is suspected that volatile contaminants are still present around the affected person, first aid personnel should wear an appropriate respirator or self-contained breathing apparatus. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.

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

General information	See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	A single exposure may cause the following adverse effects: Severe irritation of nose and throat. Symptoms following overexposure may include the following: Corrosive to the respiratory tract.
Ingestion	May cause chemical burns in mouth, oesophagus and stomach. Symptoms following overexposure may include the following: Severe stomach pain. Nausea, vomiting.

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Skin contact Causes severe burns. Symptoms following overexposure may include the following: Pain or irritation. Redness. Blistering may occur.

Eye contact Causes serious eye damage. Symptoms following overexposure may include the following: Pain. Profuse watering of the eyes. Redness.

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Containers can burst violently or explode when heated, due to excessive pressure build-up. Severe corrosive hazard. Water used for fire extinguishing, which has been in contact with the product, may be corrosive.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Very toxic or corrosive gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours. Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Avoid discharge to the aquatic environment. 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 Regular protection may not be safe. Wear chemical protective suit. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material. Avoid inhalation of vapours and spray/mists. Use suitable respiratory protection if ventilation is inadequate. Avoid contact with skin and eyes. Avoid contact with contaminated tools and objects.

6.2. Environmental precautions

Environmental precautions The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms. Avoid discharge to the aquatic environment.

6.3. Methods and material for containment and cleaning up

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Methods for cleaning up Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. This product is corrosive. Small Spillages: Collect spillage. Large Spillages: Absorb spillage with non-combustible, absorbent material. The contaminated absorbent may pose the same hazard as the spilled material. 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. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Neutralise with acid. Caution. May generate heat. Following dilution and neutralisation, discharge 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. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. 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. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists. This product is corrosive. Immediate first aid is imperative. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store away from incompatible materials (see Section 10). Store locked up. Store away from the following materials: Acids. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Bund storage facilities to prevent soil and water pollution in the event of spillage. The storage area floor should be leak-tight, jointless and not absorbent.

Storage class Corrosive 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

Sodium Hydroxide

Long-term exposure limit (8-hour TWA): WEL 2 mg/m³

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

2-Butoxyethanol

Long-term exposure limit (8-hour TWA): WEL 25 ppm(Sk) 123 mg/m³(Sk)

Short-term exposure limit (15-minute): WEL 50 ppm(Sk) 246 mg/m³(Sk)

WEL = Workplace Exposure Limit.

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tetrasodium ethylene diamine tetraacetate (CAS: 64-02-8)

DNEL Consumer - Inhalation; Short term : 1.5 mg/m³
Consumer - Inhalation; Long term : 1.5 mg/m³
Consumer - Oral; Long term : 25 mg/kg/day

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/l

Alkyl Amidopropyl Betaine (CAS: 147170-44-3)

DNEL Workers - Inhalation; Long term systemic effects: 44 mg/m³
Workers - Dermal; Long term systemic effects: 12.5 mg/kg
Consumer - Oral; Long term systemic effects: 7.5 mg/kg
Consumer - Dermal; Long term systemic effects: 7.5 mg/kg

PNEC Fresh water; 0.0135 mg/l
marine water; 0.00135 mg/l
STP; 3000 mg/l

Sodium Hydroxide (CAS: 1310-73-2)

DNEL Consumer - Inhalation; Long term local effects: 1 mg/m³
Workers - Inhalation; Long term local effects: 1 mg/m³

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

DNEL Consumer - Oral; Long term systemic effects: 3.2 mg/kg/day
Worker Inhalation Long Term Systemic Effects 98 mg/m³
Consumer - Dermal; Short term systemic effects: 44.5 mg/kg/day
Industry - Dermal; Short term systemic effects: 89 mg/kg/day
Consumer - Dermal; Long term systemic effects: 38 mg/kg/day
Industry - Dermal; Long term systemic effects: 75 mg/kg/day
Consumer - Inhalation; Short term local effects: 123 mg/m³
Consumer - Inhalation; Short term systemic effects: 426 mg/m³
Industry - Inhalation; Short term systemic effects: 246 mg/m³
Consumer - Inhalation; Long term systemic effects: 49 mg/m³

PNEC - Fresh water; 8.8 mg/l
- Sediment (Freshwater); 34.6 mg/kg
- Sediment (Marinewater); 3.46 mg/kg
- marine water; 0.88 mg/l
- STP; 463 mg/l
- Soil; 2.8 mg/kg

8.2. Exposure controls

Protective equipment



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Appropriate engineering controls	Provide adequate ventilation. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimise exposure.
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. 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. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.
Other skin and body protection	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
Hygiene measures	Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Preventive industrial medical examinations should be carried out. Warn cleaning personnel of any hazardous properties of the product.
Respiratory protection	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14387. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.
Environmental exposure controls	Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. Store in a demarcated bunded area to prevent release to drains and/or watercourses.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Blue.
Odour	Characteristic.
Odour threshold	Not determined.
pH	pH (concentrated solution): ~ 14
Melting point	Not determined.
Initial boiling point and range	Not determined.

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Flash point	Not determined.
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not determined.
Upper/lower flammability or explosive limits	Not determined.
Other flammability	Not determined.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	~ 1.1
Bulk density	Not determined.
Solubility(ies)	Soluble in water.
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	Not determined.
Explosive properties	Not determined.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not determined.
Comments	Information given is applicable to the product as supplied.

9.2. Other information

Other information	No relevant information available.
Refractive index	Not determined.
Particle size	Not determined.
Molecular weight	Not determined.
Volatility	Not determined.
Saturation concentration	Not determined.
Critical temperature	Not determined.
Volatile organic compound	Not determined.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity See the other subsections of this section for further details.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

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Possibility of hazardous reactions No potentially hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Materials to avoid Acid anhydrides. Acids. Phenols, cresols.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Corrosive gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Summary Based on available data the classification criteria are not met.

ATE oral (mg/kg) 20,844.19

Acute toxicity - dermal

Summary Based on available data the classification criteria are not met.

ATE dermal (mg/kg) 156,985.87

Acute toxicity - inhalation

Summary Based on available data the classification criteria are not met.

ATE inhalation (vapours mg/l) 1,569.86

ATE inhalation (dusts/mists mg/l) 19.65

Skin corrosion/irritation

Summary Causes severe skin burns and eye damage.

Extreme pH ≥ 11.5 Corrosive.

Serious eye damage/irritation

Summary Causes serious eye damage.

Respiratory sensitisation

Summary Based on available data the classification criteria are not met.

Skin sensitisation

Summary Based on available data the classification criteria are not met.

Germ cell mutagenicity

Summary Based on available data the classification criteria are not met.

Carcinogenicity

Summary Based on available data the classification criteria are not met.

IARC carcinogenicity

None of the ingredients are listed or exempt.

Reproductive toxicity

Summary Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

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Summary Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

Summary Based on available data the classification criteria are not met.

Aspiration hazard

Summary Based on available data the classification criteria are not met.

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

Inhalation Corrosive to the respiratory tract. Symptoms following overexposure may include the following: Severe irritation of nose and throat.

Ingestion May cause chemical burns in mouth, oesophagus and stomach. Symptoms following overexposure may include the following: Severe stomach pain. Nausea, vomiting.

Skin contact Causes severe burns. Symptoms following overexposure may include the following: Pain or irritation. Redness. Blistering may occur.

Eye contact Causes serious eye damage. Symptoms following overexposure may include the following: Pain. Profuse watering of the eyes. Redness.

Route of exposure Ingestion Inhalation Skin and/or eye contact

Target organs No specific target organs known.

Toxicological information on ingredients.

tetrasodium ethylene diamine tetraacetate

Toxicological effects No data available.

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,000.0

Species Rat

ATE oral (mg/kg) 2,000.0

Acute toxicity - dermal

Summary No data available.

Acute toxicity - inhalation

Summary No data available.

Acute toxicity inhalation (LC₅₀ dust/mist mg/l) 1.0

Species Rat

ATE inhalation (dusts/mists mg/l) 1.5

Skin corrosion/irritation

Summary No data available.

Serious eye damage/irritation

Summary Causes eye irritation.

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Respiratory sensitisation

Summary No data available.

Skin sensitisation

Summary No data available.

Germ cell mutagenicity

Summary No data available.

Carcinogenicity

Summary No data available.

Reproductive toxicity

Summary No data available.

Specific target organ toxicity - single exposure

Summary No data available.

Specific target organ toxicity - repeated exposure

Summary Causes damage to organs through prolonged or repeated exposure if inhaled.

Aspiration hazard

Summary No data available.

Alkyl Amidopropyl Betaine

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,000.0

Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,000.0

Species Rat

Skin corrosion/irritation

Summary No data available.

Serious eye damage/irritation

Summary Causes serious eye damage.

Respiratory sensitisation

Summary No data available.

Skin sensitisation

Summary No data available.

Germ cell mutagenicity

Summary No data available.

Carcinogenicity

Summary No data available.

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Reproductive toxicity

Summary No data available.

Specific target organ toxicity - single exposure

Summary No data available.

Specific target organ toxicity - repeated exposure

Summary No data available.

Aspiration hazard

Summary No data available.

Sodium Hydroxide

Acute toxicity - oral

**Acute toxicity oral (LD₅₀
mg/kg)** 2,000.0

Species Rat

Acute toxicity - dermal

Summary Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Summary Based on available data the classification criteria are not met.

Skin corrosion/irritation

Summary Causes severe burns.

Serious eye damage/irritation

Summary Risk of serious damage to eyes.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Summary Not a skin sensitiser.

Germ cell mutagenicity

Summary This substance has no evidence of mutagenic properties.

Carcinogenicity

Summary Based on available data the classification criteria are not met.

Reproductive toxicity

Summary Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

Summary Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

Summary Based on available data the classification criteria are not met.

Aspiration hazard

Summary Based on available data the classification criteria are not met.

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2-Butoxyethanol

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) 2,000.0

Species Guinea pig

ATE dermal (mg/kg) 2,000.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 20.0

Species Rat

ATE inhalation (vapours mg/l) 20.0

Skin contact Causes skin irritation. The product irritates mucous membranes and may cause abdominal discomfort if swallowed.

Eye contact Causes serious eye irritation.

Acute and chronic health hazards Prolonged or repeated exposure may cause severe irritation.

Route of exposure Skin and/or eye contact Inhalation Ingestion Skin absorption

SECTION 12: Ecological information

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

12.1. Toxicity

Acute aquatic toxicity

Summary Based on available data the classification criteria are not met.

Chronic aquatic toxicity

Summary Based on available data the classification criteria are not met.

Ecological information on ingredients.

tetrasodium ethylene diamine tetraacetate

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 100 mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 100 mg/l, Daphnia magna

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Acute toxicity - microorganisms	EC ₂₀ , 30 minutes: 500 mg/l, Activated sludge
Acute toxicity - terrestrial	EC ₅₀ , 14 days: 156 mg/kg, Eisenia Fetida (Earthworm)

Alkyl Amidopropyl Betaine

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 1.11 mg/l, Cyprinodon variegatus (Sheepshead minnow)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 6.5 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 1.5 mg/l, Algae
Acute toxicity - microorganisms	EC ₀ , : 3000 mg/l, Activated sludge

Chronic aquatic toxicity

Chronic toxicity - fish early life stage	NOEC, 100 days: 0.135 mg/l, Oncorhynchus mykiss (Rainbow trout)
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 0.32 mg/l, Daphnia magna LOEC, 21 days: 0.56 mg/l, Daphnia magna

Sodium Hydroxide

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 48 hours: 189 mg/l, Leuciscus idus (Golden orfe) LC ₅₀ , 96 hours: 55.6 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 156 mg/l, Daphnia magna EC ₅₀ , : >100 mg/l, Daphnia magna

Chronic aquatic toxicity

Summary	No information available.
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2-Butoxyethanol

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 1474 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	NOEC, 21 days: 100 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 1840 mg/l, Algae NOEC, 72 hours: 286 mg/l, Algae

Chronic aquatic toxicity

Chronic toxicity - fish early life stage	NOEC, 56 days: 4.36 mg/l, Oncorhynchus mykiss (Rainbow trout)
Chronic toxicity - aquatic invertebrates	NOEC, 24 days: 1057 mg/l, Daphnia magna

12.2. Persistence and degradability

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Persistence and degradability The surfactant(s) contained in this product complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.

Ecological information on ingredients.

tetrasodium ethylene diamine tetraacetate

Persistence and degradability The product is not biodegradable.

Alkyl Amidopropyl Betaine

Persistence and degradability , 28 days: 20 mg/l, Activated sludge

Chemical oxygen demand 1000000 mg O₂/l

Sodium Hydroxide

Persistence and degradability The product is not biodegradable.

2-Butoxyethanol

Persistence and degradability The product is biodegradable. OCED 301B 90.4% - 28 days

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

Ecological information on ingredients.

tetrasodium ethylene diamine tetraacetate

Bioaccumulative potential No information available.

Alkyl Amidopropyl Betaine

Bioaccumulative potential No data available on bioaccumulation.

Sodium Hydroxide

Bioaccumulative potential No information available.

2-Butoxyethanol

Bioaccumulative potential : < 100 (l), The product is not expected to be toxic to aquatic organisms.

12.4. Mobility in soil

Mobility The product is water-soluble and may spread in water systems. The product is non-volatile.

Ecological information on ingredients.

tetrasodium ethylene diamine tetraacetate

Mobility No data available.

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Adsorption/desorption coefficient No information available.

Alkyl Amidopropyl Betaine

Mobility No data available.

Sodium Hydroxide

Mobility No data available.

2-Butoxyethanol

Adsorption/desorption coefficient Water - Koc: 50-180 @ °C

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.

Ecological information on ingredients.

tetrasodium ethylene diamine tetraacetate

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

Alkyl Amidopropyl Betaine

Results of PBT and vPvB assessment Not relevant.

Sodium Hydroxide

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

2-Butoxyethanol

Results of PBT and vPvB assessment Not relevant.

12.6. Other adverse effects

Other adverse effects None known.

Ecological information on ingredients.

tetrasodium ethylene diamine tetraacetate

Other adverse effects None known.

Alkyl Amidopropyl Betaine

Other adverse effects The product may have adverse effects on organisms in soil and water.

2-Butoxyethanol

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Other adverse effects Do not discharge into drains or watercourses or onto the ground.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. 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. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Disposal methods Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

General For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.

14.1. UN number

UN No. (ADR/RID)	1760
UN No. (IMDG)	1760
UN No. (ICAO)	1760
UN No. (ADN)	1760

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	CORROSIVE LIQUID, N.O.S. CONTAINS SODIUM HYDROXIDE
Proper shipping name (IMDG)	CORROSIVE LIQUID, N.O.S. CONTAINS SODIUM HYDROXIDE
Proper shipping name (ICAO)	CORROSIVE LIQUID, N.O.S. CONTAINS SODIUM HYDROXIDE
Proper shipping name (ADN)	CORROSIVE LIQUID, N.O.S. CONTAINS SODIUM HYDROXIDE

14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID classification code	C9
ADR/RID label	8
IMDG class	8
ICAO class/division	8
ADN class	8

Transport labels



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14.4. Packing group

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

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS	F-A, S-B
ADR transport category	3
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

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

SECTION 15: Regulatory information

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

National regulations	Health and Safety at Work etc. Act 1974 (as amended). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"]. EH40/2005 Workplace exposure limits.
EU legislation	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). Commission Regulation (EU) No 2015/830 of 28 May 2015. 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). Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

None of the ingredients are listed or exempt.

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SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	<p>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.</p> <p>ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.</p> <p>RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.</p> <p>IATA: International Air Transport Association.</p> <p>ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.</p> <p>IMDG: International Maritime Dangerous Goods.</p> <p>CAS: Chemical Abstracts Service.</p> <p>ATE: Acute Toxicity Estimate.</p> <p>LC₅₀: Lethal Concentration to 50 % of a test population.</p> <p>LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).</p> <p>EC₅₀: 50% of maximal Effective Concentration.</p> <p>PBT: Persistent, Bioaccumulative and Toxic substance.</p> <p>vPvB: Very Persistent and Very Bioaccumulative.</p>
Classification abbreviations and acronyms	<p>Eye Dam. = Serious eye damage</p> <p>Skin Corr. = Skin corrosion</p>
Classification procedures according to Regulation (EC) 1272/2008	<p>Eye Dam. 1 - H318: Skin Corr. 1 - H314: : Calculation method.</p>
Training advice	<p>Read and follow manufacturer's recommendations. Only trained personnel should use this material.</p>
Revision date	12/01/2022
Revision	2
Supersedes date	01/04/2015
Hazard statements in full	<p>H290 May be corrosive to metals.</p> <p>H302 Harmful if swallowed.</p> <p>H312 Harmful in contact with skin.</p> <p>H314 Causes severe skin burns and eye damage.</p> <p>H315 Causes skin irritation.</p> <p>H318 Causes serious eye damage.</p> <p>H319 Causes serious eye irritation.</p> <p>H332 Harmful if inhaled.</p> <p>H373 May cause damage to organs (Respiratory system, lungs) through prolonged or repeated exposure.</p> <p>H412 Harmful to aquatic life with long lasting effects.</p>

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.