



SAFETY DATA SHEET

Low temperature Detergent

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.

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

1.1. Product identifier

Product name	Low temperature Detergent
Product number	7880/23531
UFI	UFI: JJTP-G0H4-D009-CTF1

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

Identified uses	Detergent. Cleaning agent.
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1.3. Details of the supplier of the safety data sheet

Supplier	Tennant UK Cleaing Solutions Ltd Unit C5 Leadbeaters Lane Bolton Lancashire BL5 1FL Tel: 0161 728 1800 (Option 2)
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1.4. Emergency telephone number

Emergency telephone	0161 728 8300 (Mon-Fri 9am-5pm)
National emergency telephone number	(GB) NHS Direct: 111 National Poisons Information Service Tel: +44 344 892 0111 (UK) - Medical Professionals Only National Poisons Information Centre Tel: +353 (01) 809 2566 (Ireland) - Healthcare Professionals only (24 hour service)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards	Not Classified
Health hazards	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319
Environmental hazards	Not Classified

2.2. Label elements

Hazard pictograms



Signal word	Warning
Hazard statements	H315 Causes skin irritation. H319 Causes serious eye irritation.

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Precautionary statements	<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>P332+P313 If skin irritation occurs: Get medical advice/ attention.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p>
Detergent labelling	< 5% anionic surfactants, < 5% non-ionic surfactants
Supplementary precautionary statements	<p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P362+P364 Take off contaminated clothing and wash it 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

<p>SODIUM CARBONATE >80%</p> <p>CAS number: 497-19-8 EC number: 207-838-8</p>
<p>Classification</p> <p>Eye Irrit. 2 - H319</p>
<p>Sodium Silicate MR >3.2 15-30%</p> <p>CAS number: 1344-09-8 EC number: 215-687-4</p>
<p>Classification</p> <p>Skin Irrit. 2 - H315</p> <p>Eye Irrit. 2 - H319</p> <p>STOT SE 3 - H335</p>
<p>Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide 1-3%</p> <p>CAS number: — EC number: 932-051-8</p>
<p>Classification</p> <p>Skin Irrit. 2 - H315</p> <p>Eye Dam. 1 - H318</p> <p>Aquatic Chronic 3 - H412</p>

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 if symptoms are severe or persist. Remove affected person from source of contamination.
Inhalation	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.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Give milk instead of water if readily available. Get medical attention immediately.
Skin contact	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.

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Eye contact Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

Protection of first aiders Use protective equipment appropriate for surrounding materials.

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 May cause respiratory system irritation.

Ingestion May cause stomach pain or vomiting. May cause chemical burns in mouth and throat.

Skin contact Skin irritation.

Eye contact This product is strongly irritating. May cause chemical eye burns.

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.

5.2. Special hazards arising from the substance or mixture

Specific hazards No unusual fire or explosion hazards noted.

Hazardous combustion products Does not decompose when used and stored as recommended.

5.3. Advice for firefighters

Protective actions during firefighting If risk of water pollution occurs, notify appropriate authorities. 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. Firefighter's clothing 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 Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of dust.

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.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Inform authorities if large amounts are involved. Dispose of contents/container in accordance with national regulations.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. 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 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 handling which leads to dust formation.

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Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse.

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.

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

SODIUM CARBONATE

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

Sodium Silicate MR >3.2

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

WEL = Workplace Exposure Limit.

SODIUM CARBONATE (CAS: 497-19-8)

Ingredient comments WEL = Workplace Exposure Limits
DNEL Workers - Inhalation; Long term local effects: 10 mg/m³

Sodium Silicate MR >3.2 (CAS: 1344-09-8)

DNEL Workers - Inhalation; Long term systemic effects: 5.61 mg/m³
 Workers - Dermal; Long term systemic effects: 1.59 mg/kg bw/day
 Consumer - Oral; Long term systemic effects: 0.8 mg/kg bw/day
 Consumer - Inhalation; Long term systemic effects: 1.38 mg/m³
 Consumer - Dermal; Long term systemic effects: 0.8 mg/kg bw/day
PNEC - Fresh water; 7.5 mg/l
 - marine water; 1 mg/l
 - Water, Intermittent release; 7.5 mg/l
 - STP; 348 mg/l

Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide

DNEL Workers - Dermal; Long term systemic effects: 85 mg/kg bw/day
 Workers - Inhalation; Long term systemic effects: 6 mg/m³
 Consumer - Dermal; Long term systemic effects: 42.5 mg/kg bw/day
 Consumer - Inhalation; Long term systemic effects: 1.5 mg/m³
 Consumer - Oral; Long term systemic effects: 0.425 mg/kg bw/day
PNEC - Fresh water; 0.268 mg/l
 - marine water; 0.0268 mg/l
 - Intermittent release; 0.055 mg/l
 - STP; 5.6 mg/l
 - Sediment (Freshwater); 8.1 mg/kg dw
 - Sediment (Marinewater); 8.1 mg/kg dw
 - Soil; 35 mg/kg dw

8.2. Exposure controls

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Protective equipment



Appropriate engineering controls	No specific ventilation requirements.
Eye/face protection	Safety glasses with side-shields (EN 166).
Hand protection	Chemical resistant PVC/Nitrilrubber gloves (to European standard EN 374 or equivalent). Thickness: 0,4 mm. Penetration time: >480 min (level 6). The selection of specific gloves for a specific application and time of use in a working area, should also take into account other factors on the working space, such as (but not limited to): other chemicals that are possibly used, physical requirements (protection against cutting/drilling, skill, thermal protection), and the instructions/specification of the supplier of gloves.
Other skin and body protection	Wear suitable protective clothing (EN14605)
Hygiene measures	Do not eat, drink or smoke when using this product.
Respiratory protection	Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Granules.
Colour	White.
Odour	Odourless.
pH	pH (diluted solution): 10.5-11.5 1%
Solubility(ies)	Soluble in water.

9.2. Other information

Other information	Not available.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Avoid contact with acids.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Will not polymerise.
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10.4. Conditions to avoid

Conditions to avoid	Avoid contact with acids.
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10.5. Incompatible materials

Materials to avoid	Strong acids.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Does not decompose when used and stored as recommended.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects	Not regarded as a health hazard under current legislation.
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Acute toxicity - oral	
Notes (oral LD ₅₀)	Based on available data the classification criteria are not met.
Acute toxicity - dermal	
Notes (dermal LD ₅₀)	Based on available data the classification criteria are not met.
Acute toxicity - inhalation	
Notes (inhalation LC ₅₀)	Based on available data the classification criteria are not met.
Skin corrosion/irritation	
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory sensitisation	
Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitisation	
Skin sensitisation	Based on available data the classification criteria are not met.
Germ cell mutagenicity	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Carcinogenicity	
Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
Reproductive toxicity	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.
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	
Aspiration hazard	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	Dust may irritate the respiratory system. Symptoms following overexposure to dust may include the following: Coughing. Shortness of breath.
Ingestion	Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.
Skin contact	Irritating to skin.
Eye contact	This product is strongly irritating.
Acute and chronic health hazards	This product may cause skin and eye irritation. Repeated exposure may cause chronic eye irritation. Mild dermatitis, allergic skin rash.
Route of exposure	Skin and/or eye contact Inhalation Ingestion
Toxicological information on ingredients.	

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SODIUM CARBONATE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,800.0

Species Rat

ATE oral (mg/kg) 2,800.0

Acute toxicity - dermal

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

Species Rabbit

ATE dermal (mg/kg) 2,001.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l) 2,300.0

Species Rat

ATE inhalation (dusts/mists mg/l) 2,300.0

Sodium Silicate MR >3.2

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 3,400.0

Species Rat

ATE oral (mg/kg) 3,400.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,001.0

Species Rat

Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 3,500.0

Species Rat

ATE oral (mg/kg) 3,500.0

Acute toxicity - dermal

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

Species Rat

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 85 mg/kg, Oral, Rat LOAEL 145 mg/kg, Oral, Rat NOAEL 440 mg/kg, Dermal, Mouse

Alcohols, C13-15, branched and linear, ethoxylated

Low temperature Detergent

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,150.0

Species Rat

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

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

Species Rat

ATE dermal (mg/kg) 2,001.0

SECTION 12: Ecological information

Ecotoxicity Not regarded as dangerous for the environment. 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.

12.1. Toxicity

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

SODIUM CARBONATE

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 300 mg/l, Freshwater fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 200-227 mg/l, Freshwater invertebrates

Sodium Silicate MR >3.2

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 1108 mg/l, Brachydanio rerio (Zebra Fish)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 1700 mg/l, Daphnia magna

Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: >1-10 mg/l, Cyprinus carpio (Common carp)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: >1-10 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: >10-100 mg/l, Desmodium subspicatus
EC₁₀, 72 hours: 1.5 mg/l, Desmodium subspicatus

Acute toxicity - microorganisms EC₅₀, 17 hours: 63 mg/l, PSEUDOMONAS PUTIDA

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOEC, 72 days: >0.1-1 mg/l, Oncorhynchus mykiss (Rainbow trout)

Chronic toxicity - aquatic invertebrates EC₂₀, 32 days: 0.27 mg/l, Corbicula

Low temperature Detergent

Alcohols, C13-15, branched and linear, ethoxylated

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: >1-10 mg/l, Brachydanio rerio (Zebra Fish)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: >1-10 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: >1-10 mg/l, Scenedesmus subspicatus

Acute toxicity - microorganisms EC10, : >1000 mg/l, Activated sludge

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates NOEC, 21 days: >0.1-1 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability This surfactant complies with the biodegradability criteria as laid down in The Detergents Regulations (as amended).

Ecological information on ingredients.

Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide

Biodegradation OECD 301A - Degradation >70%: 28 days

Alcohols, C13-15, branched and linear, ethoxylated

Biodegradation OECD 301B - Degradation >60%:
OECD 303A - Degradation >=90%:

Chemical oxygen demand 2430 mg/g

12.3. Bioaccumulative potential

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

12.4. Mobility in soil

Mobility The product is soluble in water.

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 None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Dispose of in accordance with Local Authority regulations as special waste according to The Control of Special Waste Regulations 1996.

EURAL Code

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.

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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 MARPOL and the IBC Code

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

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.

Drug Precursors Regulation (273/2004)

Danish product registration number

Danish national regulations

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.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
IATA: International Air Transport Association.
ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
IMDG: International Maritime Dangerous Goods.
CAS: Chemical Abstracts Service.
ATE: Acute Toxicity Estimate.
LC50: Lethal Concentration to 50 % of a test population.
LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).
EC₅₀: 50% of maximal Effective Concentration.
PBT: Persistent, Bioaccumulative and Toxic substance.
vPvB: Very Persistent and Very Bioaccumulative.

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Revision comments	This is the first issue.
Revision date	09/02/2024
Revision	0
SDS number	7880/23531
Hazard statements in full	H315 Causes skin irritation. H318 Causes serious eye damage. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H412 Harmful to aquatic life with long lasting effects.

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.



SAFETY DATA SHEET

Decarbonizer LT Solution

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 Decarbonizer LT Solution

Product number 7880B/22512

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

Identified uses Detergent. Cleaning agent.

1.3. Details of the supplier of the safety data sheet

Supplier Tennant UK Cleaning Solutions Ltd
Unit C5
Leadbeaters Lane
Bolton
Lancashire
BL5 1FL
Tel: 0161 728 1800 (Option 2)

1.4. Emergency telephone number

Emergency telephone 0161 728 8300 (Mon-Fri 9am-5pm)

National emergency telephone number National Poisons Information Service Tel: +44 344 892 0111 (UK) - Medical Professionals Only National Poisons Information Centre Tel: +353 (01) 809 2566 (Ireland) - Healthcare Professionals only (24 hour service)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

2.2. Label elements

Hazard statements NC Not Classified

Precautionary statements P262 Do not get in eyes, on skin, or on clothing.

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

Decarbonizer LT Solution

SODIUM CARBONATE		1-3%
CAS number: 497-19-8	EC number: 207-838-8	REACH registration number: 01-2119485498-19-XXXX
Classification Eye Irrit. 2 - H319		

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

Composition comments No classified ingredients, or those having occupational exposure limits, present above the levels of disclosure.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Get medical attention if symptoms are severe or persist. Remove affected person from source of contamination.
Inhalation	Unlikely route of exposure as the product does not contain volatile substances. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Give milk instead of water if readily available. Get medical attention immediately.
Skin contact	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

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	Spray/mists may cause respiratory tract irritation. This is unlikely to occur but symptoms similar to those of ingestion may develop.
Ingestion	May cause discomfort if swallowed. May cause stomach pain or vomiting.
Skin contact	May cause skin irritation. Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.
Eye contact	May cause eye irritation.

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.

5.2. Special hazards arising from the substance or mixture

Specific hazards	No unusual fire or explosion hazards noted.
Hazardous combustion products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting If risk of water pollution occurs, notify appropriate authorities. Control run-off water by containing and keeping it out of sewers and watercourses.

Decarbonizer LT Solution

Special protective equipment for firefighters 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 Wear protective clothing as described in Section 8 of this safety data sheet.

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.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb in vermiculite, dry sand or earth and place into containers. Wash thoroughly after dealing with a spillage. Dispose of contents/container in accordance with national regulations.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. 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 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.

Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep above the chemical's freezing point to avoid rupturing the container. Keep container tightly closed, in a cool, well ventilated place.

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

SODIUM CARBONATE

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³ resp.dust

Sodium Silicate MR >3.2

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

WEL = Workplace Exposure Limit.

SODIUM CARBONATE (CAS: 497-19-8)

Ingredient comments WEL = Workplace Exposure Limits

DNEL Workers - Inhalation; Long term local effects: 10 mg/m³

Sodium Silicate MR >3.2 (CAS: 1344-09-8)

Decarbonizer LT Solution

DNEL	Workers - Inhalation; Long term systemic effects: 5.61 mg/m ³ Workers - Dermal; Long term systemic effects: 1.59 mg/kg bw/day Consumer - Oral; Long term systemic effects: 0.8 mg/kg bw/day Consumer - Inhalation; Long term systemic effects: 1.38 mg/m ³ Consumer - Dermal; Long term systemic effects: 0.8 mg/kg bw/day
PNEC	- Fresh water; 7.5 mg/l - marine water; 1 mg/l - Water, Intermittent release; 7.5 mg/l - STP; 348 mg/l

Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide

DNEL	Workers - Dermal; Long term systemic effects: 85 mg/kg bw/day Workers - Inhalation; Long term systemic effects: 6 mg/m ³ Consumer - Dermal; Long term systemic effects: 42.5 mg/kg bw/day Consumer - Inhalation; Long term systemic effects: 1.5 mg/m ³ Consumer - Oral; Long term systemic effects: 0.425 mg/kg bw/day
PNEC	- Fresh water; 0.268 mg/l - marine water; 0.0268 mg/l - Intermittent release; 0.055 mg/l - STP; 5.6 mg/l - Sediment (Freshwater); 8.1 mg/kg dw - Sediment (Marinewater); 8.1 mg/kg dw - Soil; 35 mg/kg dw

8.2. Exposure controls

Protective equipment



Appropriate engineering controls	Provide adequate ventilation if the airborne contamination exceeds occupational exposure limits
Eye/face protection	Safety glasses with side-shields (EN 166).
Hand protection	Chemical resistant PVC/Nitrilrubber gloves (to European standard EN 374 or equivalent). Thickness: 0,4 mm. Penetration time: >480 min (level 6). The selection of specific gloves for a specific application and time of use in a working area, should also take into account other factors on the working space, such as (but not limited to): other chemicals that are possibly used, physical requirements (protection against cutting/drilling, skill, thermal protection), and the instructions/specification of the supplier of gloves.
Other skin and body protection	Wear suitable protective clothing (EN14605)
Hygiene measures	Do not eat, drink or smoke when using this product.
Respiratory protection	Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
pH	pH (concentrated solution): 11.5-12.0
Relative density	1.03 @ 20°C

9.2. Other information

Other information	Not available.
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Decarbonizer LT Solution

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity The following materials may react with the product: Alkalis. Oxidising agents. Reducing agents.

10.2. Chemical stability

Stability No particular stability concerns. Avoid contact with alkalis.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Under normal conditions of storage and use, hazardous reactions will not occur.

10.4. Conditions to avoid

Conditions to avoid Avoid freezing.

10.5. Incompatible materials

Materials to avoid Strong alkalis. Oxidising agents. Reducing agents.

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: Harmful gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects Not regarded as a health hazard under current legislation.

Acute toxicity - oral

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

Skin corrosion/irritation

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

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

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

Skin sensitisation

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

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Carcinogenicity

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

IARC carcinogenicity

None of the ingredients are listed or exempt.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity - development

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

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

Decarbonizer LT Solution

Specific target organ toxicity - repeated exposure

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

Aspiration hazard

Aspiration hazard 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

Spray/mists may cause respiratory tract irritation. This is unlikely to occur but symptoms similar to those of ingestion may develop.

Ingestion

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

Skin contact

May cause skin irritation. Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.

Eye contact

May cause eye irritation.

Acute and chronic health hazards

This product may cause skin and eye irritation. Repeated exposure may cause chronic eye irritation. Mild dermatitis, allergic skin rash.

Route of exposure

Skin and/or eye contact
Inhalation
Ingestion

Toxicological information on ingredients.

Sodium Silicate MR >3.2

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 3,400.0

Species Rat

ATE oral (mg/kg) 3,400.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,001.0

Species Rat

Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide

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) 2,001.0

Species Rat

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 85 mg/kg, Oral, Rat LOAEL 145 mg/kg, Oral, Rat NOAEL 440 mg/kg, Dermal, Mouse

PEG-7-C10 Oxo Alcohol

Decarbonizer LT Solution

Acute toxicity - oral

Acute toxicity oral (LD ₅₀ mg/kg)	501.0
Species	Rat
ATE oral (mg/kg)	501.0

SECTION 12: Ecological information

Ecotoxicity Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

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

Ecological information on ingredients.

SODIUM CARBONATE

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 300 mg/l, Freshwater fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 200-227 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC ₅₀ , 72 hours: >2420 mg/l, Algae

Sodium Silicate MR >3.2

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 1108 mg/l, Brachydanio rerio (Zebra Fish)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 1700 mg/l, Daphnia magna

Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 1-10 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 1-10 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC ₅₀ , 72 hours: 10-100 mg/l, Algae EC ₁₀ , 72 days: 1.5 mg/l, Algae
Acute toxicity - microorganisms	EC ₅₀ , 17 hours: 63 mg/l, PSEUDOMONAS PUTIDA

Chronic aquatic toxicity

Chronic toxicity - fish early life stage	NOEC, 72 days: 0.1-1 mg/l, Oncorhynchus mykiss (Rainbow trout)
Chronic toxicity - aquatic invertebrates	EC ₂₀ , 32 days: 0.27 mg/l, Freshwater invertebrates

PEG-7-C10 Oxo Alcohol

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 10-100 mg/l, Fish
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Decarbonizer LT Solution

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 10-100 mg/l, Daphnia magna

Acute toxicity - aquatic plants IC₅₀, 72 hours: 10-100 mg/l, Algae

12.2. Persistence and degradability

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. 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.

12.3. Bioaccumulative potential

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

12.4. Mobility in soil

Mobility The product is soluble in water.

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 None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Dispose of in accordance with Local Authority regulations as special waste according to The Control of Special Waste Regulations 1996.

EURAL Code

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 MARPOL and the IBC Code

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

Decarbonizer LT Solution

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).

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.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways. RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail. IATA: International Air Transport Association. ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air. IMDG: International Maritime Dangerous Goods. CAS: Chemical Abstracts Service. ATE: Acute Toxicity Estimate. LC ₅₀ : Lethal Concentration to 50 % of a test population. LD ₅₀ : Lethal Dose to 50% of a test population (Median Lethal Dose). EC ₅₀ : 50% of maximal Effective Concentration. PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative.
Revision comments	Product name change.
Revision date	09/08/2021
Revision	3
Supersedes date	26/11/2020
SDS number	7880B/22512
Hazard statements in full	H319 Causes serious eye irritation.

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.