

## SAFETY DATA SHEET

# Marine Descaler Red

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

*Trade name:* Marine Descaler Red  
*Product no.:* MBAEX01

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

*Relevant identified uses of the substance or mixture:* Cleaning product  
Restricted to professional and industrial use.

*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  
Cleaning product

Sectors of use:	Description:
LCS "C"	Consumer uses: Private households (= general public = consumers)
Process category:	Description:
PROC 11	Non industrial spraying

### 1.3. Details of the supplier of the safety data sheet

*Company and address:* **Autosmart Australia**  
11 Darrambal Close  
NSW 2283 Rathmines  
Australia  
Tel: 02 49 75 14 88 (Mon to Fri, 08:00 - 16:00 AEST)  
autosmart@autosmartaustralia.com.au

*Contact person:* Russell Butler  
*E-mail:* SHREQ@autosmart.co.uk

*SDS date:* 12/6/2026

*SDS Version:* 2.0

*Date of previous version:* 5/6/2026 (1.0)

### 1.4. Emergency telephone number

In an Emergency call 000

NCEC - For Chemical Emergency Support ONLY (spill, leak, fire, exposure or accident), Call NCEC at 1800 074 234 (toll free 24Hrs) - when calling please quote "AUTOSMART 29003-NCEC"  
Local number +61 (0)2 8 014 4558

General Information. Transport Information. Mild medical Information:-  
Autosmart Australia, Tel: 02 49 75 14 88 (Mon to Fri, 08:00 - 16:00 AEST)

National Emergency Telephone Number:

In less severe situations call the Poisons Information Centre / Poison Information Hotline: 13 11 26 (Available 24/7 from anywhere in Australia)

## SECTION 2: HAZARDS IDENTIFICATION

This material is considered hazardous according to the Work Health and Safety Regulations.

### 2.1. ▼ Classification of the substance or mixture

Met. Corr. 1; H290, May be corrosive to metals.  
 Acute Tox. 4; H302, Harmful if swallowed.  
 Acute Tox. 3; H311, Toxic in contact with skin.  
 Skin Corr. 1B; H314, Causes severe skin burns and eye damage.  
 Eye Dam. 1; H318, Causes serious eye damage.

### 2.2. Label elements

▼ Hazard pictogram(s):



Signal word:

Danger

▼ Hazard statement(s):

May be corrosive to metals. (H290)  
 Harmful if swallowed. (H302)  
 Toxic in contact with skin. (H311)  
 Causes severe skin burns and eye damage. (H314)

Precautionary statement(s):

General:

Not applicable.

Prevention:

Do not breathe vapour/mist. (P260)  
 Wear face protection/protective gloves/protective clothing. (P280)

▼ Response:

IF exposed or concerned: Call a POISON CENTER/doctor (P308+P311)  
 Specific treatment is urgent (see instructions on this label). (P320)  
 Take off immediately all contaminated clothing and wash it before reuse. (P361+P364)

Storage:

Store in a well-ventilated place. Keep container tightly closed.  
 (P403+P233)

Disposal:

Dispose of contents/container in accordance with local regulation.  
 (P501)

Hazardous substances:

hydrogen chloride  
 sulphuric acid ... %  
 hydrofluoric acid ...%  
 Amines, C10-16-alkyldimethyl, N-oxides

Additional labelling:

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

Not applicable. This product is a mixture.

### 3.2. ▼ Mixtures

Product/substance:	Identifiers:	% w/w:	Classification:	Note:
hydrogen chloride	CAS No.: 7647-01-0 EC No.: 231-595-7	5-10%	Met. Corr. 1, H290 (SCL: 0.10 %) Skin Corr. 1B, H314 (SCL: 10.00 %)	

			Eye Dam. 1, H318 (SCL: 1.00 %) STOT SE 3, H335 (SCL: 10.00 %)	
sulphuric acid ... %	CAS No.: 7664-93-9 EC No.: 231-639-5	5-10%	Skin Corr. 1A, H314 (SCL: 15.00 %) Skin Irrit. 2, H315 (SCL: 5.00 %) Eye Irrit. 2, H319 (SCL: 5.00 %)	
hydrofluoric acid ...%	CAS No.: 7664-39-3 EC No.: 231-634-8	1-3%	Met. Corr. 1, H290 Acute Tox. 2, H300 Acute Tox. 1, H310 Skin Corr. 1A, H314 Acute Tox. 2, H330	
Amines, C10-16-alkyldimethyl, N-oxides	CAS No.: 70592-80-2 EC No.: 274-687-2	<1%	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318	[19]

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

#### Other information

[19] UVCB = Unknown or variable composition, complex reaction products or of biological materials

## 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.

In the case of accident: Contact a doctor or casualty department – bring the label or this safety data sheet.

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

#### *Inhalation:*

If spray/mist has been inhaled, proceed as follows. If throat irritation or coughing persists, proceed as follows. 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. Symptoms of lung oedema (shortness of breath) may develop up to 24 hours after exposure. Keep affected person under observation. Place unconscious person on their side in the recovery position and ensure breathing can take place. Never give anything by mouth to an unconscious person. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation. Get medical attention immediately.

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

#### *Skin contact:*

It is important to remove the substance from the skin immediately. Take off immediately all contaminated clothing and wash it before reuse. Care should be taken to avoid contact with contaminants when removing contaminated clothing. Rinse immediately with plenty of water. Apply Calcium Gluconate Gel over the affected areas. Chemical

burns must be treated by a physician. Get medical attention immediately. Show this Safety Data Sheet to the medical personnel. Effects may be delayed. Keep affected person under observation. Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

*Eye contact:*

Get medical attention immediately. Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. May cause permanent damage if eye is not immediately irrigated. Continue to rinse for at least 10 minutes. Consult a physician for specific advice. Effects may be delayed. Medical aid should instil several drops of sterile calcium gluconate solution. Show this Safety Data Sheet to the medical personnel.

If in eyes: Flush eyes with plenty of water or saline solution (20-30 °C) for at least 30 minutes and continue until irritation stops. Remove contact lenses. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

*Ingestion:*

Rinse mouth thoroughly with water. Remove any dentures. Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Give milk instead of water if readily available. 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. Get medical attention immediately. In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting unless this is recommended by a doctor. Hold head facing down to prevent vomit from returning to the mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

*Burns:*

Not applicable.

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

HF specific 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. Effects may be delayed. Keep affected person under observation.

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. Delayed, often serious, breathing problems. Development of symptoms may be delayed for 24 to 48 hours.

Ingestion

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

Skin contact

A single exposure may cause the following adverse effects: Reddened skin if chemical is not removed by washing. Later, white and wrinkled skin without pain, often with delayed skin burns. Development of symptoms

may be delayed for 24 to 48 hours. Symptoms following overexposure may include the following: Pain. Unconsciousness, possibly death. Prolonged contact causes serious tissue damage.

Eye contact

Causes serious eye damage. Small amounts may cause serious damage. Symptoms following overexposure may include the following: Pain. Profuse watering of the eyes. Redness. Vapour or spray may cause eye damage, impaired sight or blindness.

Symptoms of inadvertent contact with products containing sulfuric acid are: extreme destruction of tissues of the mucous membranes and upper respiratory tract, eyes, and skin. Spasm, inflammation and edema of the larynx, Spasm, inflammation and edema of the bronchi.

Pneumonitis, pulmonary edema, burning sensation, cough, wheezing, laryngitis, Shortness of breath. Headache, Nausea, Vomiting. Effects may be delayed.

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

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

Protection of first aiders:

First aid personnel should wear appropriate protective equipment during any rescue. If it is suspected that airborne 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.

Specific treatments:

Specific notes for fluoride derivatives: If calcium gluconate gel is available, rub it into affected skin. Massage continuously until pain disappears. Do not use this method for treatment of eyes. If ingested, give milk or calcium gluconate by mouth..

IF exposed or concerned:

Get immediate medical advice/attention.

#### **Information to medics**

Bring this safety data sheet or the label from this product.

Treat symptomatically. Keep affected person under observation. Development of symptoms may be delayed for 24 to 48 hours.

## **SECTION 5: FIREFIGHTING MEASURES**

### **5.1. Extinguishing media**

Not applicable.

### **5.2. Special hazards arising from the substance or mixture**

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Halogenated compounds

Sulphur oxides

### **5.3. Advice for firefighters**

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure call the NSW Poisons Information Centre on 13 11 26 (Available 24/7) in order to obtain further advice.

Hazchem Code: 2X

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### **6.1. Personal precautions, protective equipment and emergency procedures**

Avoid direct contact with spilled substances.

Ensure adequate ventilation, especially in confined areas.  
Contaminated areas may be slippery.

**6.2. Environmental precautions**

Avoid discharge to lakes, streams, sewers, etc.  
Keep unauthorized persons away from the spill

**6.3. Methods and material for containment and cleaning up**

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.  
Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

**6.4. Reference to other sections**

See section 13 "Disposal considerations" on handling of waste.  
See section 8 "Exposure controls/personal protection" for protective measures.

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## SECTION 7: HANDLING AND STORAGE

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**7.1. Precautions for safe handling**

Avoid direct contact with the product.  
Avoid contact during pregnancy and while nursing.  
Smoking, drinking and consumption of food is not allowed in the work area.  
See section 8 "Exposure controls/personal protection" for information on personal protection.

**7.2. Conditions for safe storage, including any incompatibilities**

Store locked up. A sign warning of toxic materials shall be affixed the room and cupboard containing the product(s).  
Containers that have been opened must be carefully resealed and kept upright to prevent leakage.  
Store in a container with a resistant inner liner.

*Recommended storage material:* Keep only in original packaging.  
Container with a resistant inner liner.

*Storage conditions:* Dry, cool and well ventilated  
5 - 30°C

*Incompatible materials:* Bases  
Amines  
Stainless steel  
Metal

**7.3. Specific end use(s)**

This product should only be used for applications quoted in section 1.2.

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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**8.1. Control parameters**

hydrogen chloride  
Long term exposure limit (8 hours) (ppm): 5 Peak limitation  
Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 7.5 Peak limitation

sulphuric acid ... %  
Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 1  
Short term exposure limit (15 minutes) (mg/m<sup>3</sup>): 3

hydrofluoric acid ...%  
Long term exposure limit (8 hours) (ppm): 3 Peak limitation  
Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 2.6 Peak limitation

Propane-1,2-diol  
 Long term exposure limit (8 hours) (ppm): 150  
 Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 10

Workplace exposure standards for airborne contaminants (Safe Work Australia). (January 2024)

## 8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

*General recommendations:* Smoking, drinking and consumption of food is not allowed in the work area.

*Exposure scenarios:* There are no exposure scenarios implemented for this product.

*Exposure limits:* Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

*Appropriate technical measures:* The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked. Ensure that eyewash stations and safety showers are located within easy reach. Apply standard precautions during use of the product. Avoid inhalation of vapours.

*Hygiene measures:* In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

*Measures to avoid environmental exposure:* Keep damming materials near the workplace. If possible, collect spillage during work.

## Individual protection measures, such as personal protective equipment

*Generally:* Use only protective equipment that carries the RCM symbol.


### Respiratory Equipment:


Type:	Class:	Colour:	Standards:	:
Respiratory protection is not needed in the event of adequate ventilation.				

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 appropriately marked to a relevant standard. Check that the respirator fits tightly and the filter is changed regularly.

Gas and combination filter cartridges suitable for intended use, Full face mask respirators with replaceable filter cartridges suitable for intended use, half mask and quarter mask respirators with replaceable filter cartridges suitable for intended use, can all be used.


### Skin protection:

Recommended:	Type/Category:	Standards:	:
Non-slip safety shoes		EN ISO 20344	

Recommended:	Type/Category:	Standards:	:
Dedicated work clothing should be worn.	-	-	


Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

*Hand protection:*

Material:	Glove thickness (mm):	Breakthrough time (min.):	Standards:	:
Nitrile	0,2	> 30	EN374-2, EN16523-1, EN388	

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. The breakthrough time for any glove material may be different for different glove manufacturers. To protect hands from chemicals, wear gloves that are proven to be impervious to the chemical and resist degradation. 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. The choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use. When used with mixtures, the protection time of gloves cannot be accurately estimated. Gloves made from the following material may provide suitable chemical protection: Nitrile rubber. Thickness: > 0.2 mm The selected gloves should have a breakthrough time of at least 2 hours. Glove thickness is not necessarily a good measure of glove resistance as the permeation rate will depend on the exact glove composition. Repeated exposure to chemicals will degrade the ability of the glove to provide resistance to chemicals. Specific work environments and material handling practices may vary, therefore safety procedures should be developed for each intended application. Use thin cotton gloves inside natural rubber gloves if there is an allergy risk to natural rubber.

*Eye protection:*

Type:	Standards:	:
Face shield alternatively safety glasses with side shields.	EN166	

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment that provides appropriate eye and face protection should be worn. Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

<i>Form:</i>	Liquid
<i>Colour:</i>	Red
<i>Odour:</i>	Acidic
<i>Odour threshold (ppm):</i>	No data available.
<i>pH:</i>	1
<i>Density (g/cm<sup>3</sup>):</i>	-
<i>Relative density:</i>	1.063 (20 °C)

*Kinematic viscosity:* 1 centistokes (20 °C)  
*Particle characteristics:* Does not apply to liquids.

**Phase changes**

*Melting point/Freezing point (°C):* 0  
*Softening point/range (°C):* Does not apply to liquids.  
*Boiling point (°C):* 100  
*Vapour pressure:* No data available.  
*Relative vapour density:* No data available.  
*Decomposition temperature (°C):* No data available.

**Data on fire and explosion hazards**

*Flash point (°C):* No data available.  
*Flammability (°C):* No data available.  
*Auto-ignition temperature (°C):* No data available.  
*Explosion limits (% v/v):* No data available.

**Solubility**

*Solubility in water:* No data available.  
*n-octanol/water coefficient (LogKow):* No data available.  
*Solubility in fat (g/L):* No data available.

**9.2. Other information**

*Metals that are corroded:* Mild steel. Stainless steel. Aluminium  
*VOC (g/L):* 0  
*Other physical and chemical parameters:* No data available.  
*Oxidizing properties:* No data available.

**SECTION 10: STABILITY AND REACTIVITY**

**10.1. Reactivity**

No data available.

**10.2. Chemical stability**

The product is stable under the conditions, noted in section 7 "Handling and storage".

**10.3. Possibility of hazardous reactions**

None known.

**10.4. Conditions to avoid**

None known.

**10.5. Incompatible materials**

Amines  
 Bases  
 Stainless steel  
 Metal

**10.6. Hazardous decomposition products**

Thermal decomposition may produce corrosive vapours.

**SECTION 11: TOXICOLOGICAL INFORMATION**

### 11.1. Information on toxicological effects

#### Acute toxicity

Product/substance hydrogen chloride  
 Species: Rat  
 Route of exposure: Oral  
 Test: LD50  
 Result: 238 - 277 mg/kg bw

Product/substance sulphuric acid ... %  
 Species: Guinea pig  
 Route of exposure: Inhalation  
 Test: LC50  
 Result: 18 mg/m<sup>3</sup>

Product/substance sulphuric acid ... %  
 Species: Rat  
 Route of exposure: Oral  
 Test: LD50  
 Result: 2140 mg/kg

Product/substance hydrofluoric acid ...%  
 Species: Rat  
 Route of exposure: Inhalation  
 Test: LC50  
 Result: 996 ppm

Product/substance hydrofluoric acid ...%  
 Species: Mouse  
 Route of exposure: Inhalation  
 Test: LC50  
 Result: 280 mg/m<sup>3</sup>

Product/substance Amines, C10-16-alkyldimethyl, N-oxides  
 Test method: OECD 402  
 Species: Rat  
 Route of exposure: Dermal  
 Test: LD50  
 Result: 2000 mg/kg

Product/substance Propane-1,2-diol  
 Species: Rat  
 Route of exposure: Oral  
 Test: LD50  
 Result: 22,000 mg/kg

Product/substance Propane-1,2-diol  
 Species: Rabbit  
 Route of exposure: Dermal  
 Test: LD50  
 Result: 2001 mg/kg

Product/substance Propane-1,2-diol  
 Species: Rat  
 Route of exposure: Inhalation  
 Test: LC50  
 Result: 317.042 mg/kg

Harmful if swallowed.

Toxic in contact with skin.

#### **Skin corrosion/irritation**

Product/substance	Amines, C10-16-alkyldimethyl, N-oxides
Test method:	OECD 404
Species:	Rabbit
Result:	Adverse effect observed (Irritating)

Causes severe skin burns and eye damage.

#### **Serious eye damage/irritation**

Product/substance	Amines, C10-16-alkyldimethyl, N-oxides
Test method:	OECD 405
Species:	Rabbit
Result:	Adverse effect observed (Causes serious eye damage)

Causes serious eye damage.

#### **Respiratory sensitisation**

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

#### **Skin sensitisation**

Product/substance	Amines, C10-16-alkyldimethyl, N-oxides
Test method:	OECD 406
Species:	Guinea pig
Result:	No adverse effect observed (not sensitising)

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

#### **Germ cell mutagenicity**

Product/substance	Amines, C10-16-alkyldimethyl, N-oxides
Test method:	OECD 471
Conclusion:	No adverse effect observed

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Product/substance	Amines, C10-16-alkyldimethyl, N-oxides
Test method:	OECD 475
Species:	Mouse
Conclusion:	No adverse effect observed

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

#### **Carcinogenicity**

Based on available data, the classification criteria are not met.  
sulphuric acid ... % has been classified by IARC as a group 1.  
hydrogen chloride has been classified by IARC as a group 3.

#### **Reproductive toxicity**

Product/substance	Amines, C10-16-alkyldimethyl, N-oxides
Test method:	OECD 422
Species:	Rat
Result:	100 mg/kg bw/day
Conclusion:	No adverse effect observed

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

#### **▼ STOT-single exposure**

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

#### **▼ STOT-repeated exposure**

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

#### **Aspiration hazard**

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

#### **Long term effects**

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as

coughing. Dermal contact and contact with the eye cause irreversible effects.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

Product/substance	hydrogen chloride
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	282 mg/L

Product/substance	hydrogen chloride
Species:	Daphnia
Duration:	72 hours
Test:	EC50
Result:	56 mg/L

Product/substance	sulphuric acid ... %
Species:	Fish
Duration:	24 hours
Result:	24.5 ppm

Product/substance	hydrofluoric acid ...%
Species:	Crustacean, Gammarus lacustris
Duration:	96 hours
Test:	EC50
Result:	73.3 mg/L

Product/substance	hydrofluoric acid ...%
Species:	Fish
Duration:	28 days
Test:	NOEC
Result:	8.6 mg/L

Product/substance	Propane-1,2-diol
Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	43,500 mg/L

Product/substance	Propane-1,2-diol
Test method:	OECD 203
Species:	Fish, Oncorhynchus mykiss
Duration:	96 hours
Test:	LC50
Result:	40,613 mg/L

Product/substance	Propane-1,2-diol
Test method:	OECD 202
Species:	Daphnia, Ceriodaphnia dubia
Duration:	48 hours
Test:	LC50
Result:	18,340 mg/L

Product/substance	Propane-1,2-diol
Test method:	OECD 201
Species:	Algae, Pseudokirchneriella subcapitata

Conforms to Code of Practice - Preparation of safety data sheets for hazardous chemicals, June 2023.

Duration: 96 hours  
Result: 19000 mg/L

Product/substance: Propane-1,2-diol  
Species: Bacteria, Pseudomonas putida  
Duration: 18 hours  
Test: NOEC  
Result: 20001 mg/L

Product/substance: Propane-1,2-diol  
Species: Daphnia, Ceriodaphnia dubia  
Duration: 7 days  
Test: NOEC  
Result: 13020 mg/L

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

### 12.2. Persistence and degradability

Product/substance: Propane-1,2-diol  
Duration: 28 days  
Result: 81.7 %  
Conclusion: -  
Test: OECD 301 F

### 12.3. Bioaccumulative potential

Product/substance: Propane-1,2-diol  
BCF: 0.09  
LogKow: -1.07  
Conclusion: -

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

### 12.6. Other adverse effects

None known.

## SECTION 13: DISPOSAL CONSIDERATIONS



### Waste treatment methods





Dispose of contents/container to an approved waste disposal plant.

### Specific labelling

### Contaminated packing

## SECTION 14: TRANSPORT INFORMATION

:	14.1 UN / ID:	14.2 UN proper shipping name:	14.3 Hazard class(es):	14.4 PG*:	14.5 Env**:	Other information::
ADG	UN2922	CORROSIVE LIQUID, TOXIC, N.O.S. (sulphuric acid ... %, hydrofluoric acid ...%)	Transport hazard class: 8 Label: 8+6.1 Classification code: CT1  	II	No	Limited quantities: 1 L Tunnel restriction code: (E) See below for additional information.

	14.1 UN / ID:	14.2 UN proper shipping name:	14.3 Hazard class(es):	14.4 PG*:	14.5 Env**:	Other information::
IMDG	UN2922	CORROSIVE LIQUID, TOXIC, N.O.S. (sulphuric acid ... %, hydrofluoric acid ...%)	Transport hazard class: 8 Label: 8+6.1 Classification code: CT1  	II	No	Limited quantities: 1 L EmS: F-A S-B See below for additional information.
IATA	UN2922	CORROSIVE LIQUID, TOXIC, N.O.S. (sulphuric acid ... %, hydrofluoric acid ...%)	Transport hazard class: 8 Label: 8+6.1 Classification code: CT1  	II	No	See below for additional information.

\* Packing group

\*\* Environmental hazards

#### Additional information

This product is within scope of the regulations of transport of dangerous goods. ADR/ADN/RID / See Table A, section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

Hazchem Code: 2X

#### 14.6. Special precautions for user

Not applicable.

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

No data available.

## SECTION 15: REGULATORY INFORMATION

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

*Restrictions for application:*

Restricted to professional users.

People under the age of 18 shall not be exposed to this product. Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

*Demands for specific education:*

No specific requirements.

*Control of major hazard facilities:*

hydrofluoric acid ...% / Treshold quantity: 50 tonnes  
hydrogen chloride / Treshold quantity: 250 tonnes

*Additional information:*

Not applicable.

*The Australian Inventory of Industrial Chemicals (AIIC):*

hydrogen chloride is listed  
sulphuric acid ... % is listed  
hydrofluoric acid ...% is listed  
Amines, C10-16-alkyldimethyl, N-oxides is listed  
Propane-1,2-diol is listed

*SUSMP:*

Schedule 7. Dangerous poisons.

*Sources:* National Standard for the Control of Major Hazard Facilities  
[NOHSC:1014(2002)].  
Model Work Health and Safety Regulations as at 1 January 2021.

## 15.2. Chemical safety assessment

No

## SECTION 16: OTHER INFORMATION

### ▼ Full text of H-phrases as mentioned in section 3

H290, May be corrosive to metals.  
H300, Fatal if swallowed.  
H302, Harmful if swallowed.  
H310, Fatal in contact with skin.  
H314, Causes severe skin burns and eye damage.  
H315, Causes skin irritation.  
H318, Causes serious eye damage.  
H319, Causes serious eye irritation.  
H330, Fatal if inhaled.  
H335, May cause respiratory irritation.

### The full text of identified uses as mentioned in section 1

None known.

### Abbreviations and acronyms

ADG = The Australian Code for the Transport of Dangerous Goods by Road & Rail  
AICIS = Australian Industrial Chemicals Introduction Scheme  
AIIC = Australian Inventory of Industrial Chemicals  
AS = Australian Standard  
AS/NZS = Australian New Zealand Standard  
ATE = Acute Toxicity Estimate  
AUH = Hazard statements specific for Australia  
BCF = Bioconcentration Factor  
CAS = Chemical Abstracts Service  
EINECS = European Inventory of Existing Commercial chemical Substances  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
Hazchem = Hazardous chemicals  
IARC = International Agency for Research on Cancer  
IATA = International Air Transport Association  
IMDG = International Maritime Dangerous Goods  
LogKow = logarithm of the n-octanol/water coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
NICNAS = National Industrial Chemicals Notification and Assessment Scheme (replaced by AICIS since 2020)  
OECD = Organisation for Economic Co-operation and Development  
PBT = Persistent, Bioaccumulative and Toxic  
RCM = Regulatory Mark of Conformity  
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail  
SCL = A specific concentration limit  
STEL = Short-term exposure limits  
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure  
STOT-SE = Specific Target Organ Toxicity - Single Exposure  
SUSMP = Standard for the Uniform Scheduling of Medicines and Poisons  
TWA = Time weighted average  
UN = United Nations  
UVBC = Unknown or variable composition, complex reaction products or of biological materials  
VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

WHS = Work Health and Safety Regulations

**Additional information**

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by the Work Health and Safety Regulations.

**The safety data sheet is validated by**

Russell Butler

**Other**

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: AU-en