

**SAFETY DATA SHEET**

*In accordance with Annex II of Regulations (EC) 1907/2006 as amended by Regulation (EU) 830/2015*

**1 IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY**

**1.1 Product identifier**

Product Name: **Red Algae Remover**

**1.2 Relevant identified uses of the substance or mixture and uses advised against**  
**Identified uses:**

**Red Algae Remover-** For professional use only

**Uses advised against:**

Uses other than those identified are not recommended

**1.3 Details of the supplier of the safety data sheet**

Company Name: Gannon Chemicals Ltd  
Ballindine, Claremorris  
Co. Mayo. Ireland  
Email address of SDS author: paul@gannonchemicals.ie

**1.4 Emergency Telephone Number**

Members of Public: +353 (1) 809 2166. (8.00 a.m. to 10.00 p.m. 7 days a week)  
Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

**2 HAZARDS IDENTIFICATION**

**2.1 Classification of the substance or mixture**

*Classification according to Regulation (EC) No 1272/2008*

Eye Damage (Category 1), H319

Very toxic to aquatic life, H400

**2.2 Label elements**

*Labelling according Regulation (EC) No 1272/2008*

Pictogram



Signal word

Danger

**Hazard statement(s)**

H318 Causes serious eye damage

H315 Causes skin irritation

H400 Very toxic to aquatic life

**Precautionary statement(s)**

P273 Avoid release to the environment

P280 Wear protective gloves/protective clothing/eye protection/face protection

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P391 Collect spillage

**Supplemental Hazard:** None

**2.3 Other hazards**

No other hazards known. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII.

### 3 COMPOSITION / INFORMATION ON INGREDIENTS

#### 3.2 Mixtures

| Product/Ingredient Name          | CAS No.   | Weight % | EC Number | Regulation (EC) No 1272/2008 [CLP]  |
|----------------------------------|-----------|----------|-----------|---|
| Didecyldimethylammonium chloride | 7173-51-5 | 5 - 10   | 230-525-2 | Acute Tox. 4: H302<br>Skin Corr. 1B: H314<br>STOT 3; H336<br>Aquatic Acute 1 H400<br>Aquatic Chronic 2 H411 |

### 4 FIRST AID MEASURES

#### 4.1 Description of first aid measures

- |       |                                    |   |
|-------|------------------------------------|---|
| 4.1.1 | General Information                | Immediately remove contaminated clothing.   |
| 4.1.2 | Following Inhalation               | Keep patient calm, remove to fresh air, and seek medical attention.   |
| 4.1.3 | following skin contact             | Wash thoroughly with soap and water.  |
| 4.1.4 | Following Eye Contact              | Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist. |
| 4.1.5 | Following Ingestion                | Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.                               |
| 4.1.6 | Self-protection of the first aider |   |

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

Symptoms: Eye irritation, skin irritation

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

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

### 5 FIRE FIGHTING MEASURES

#### 5.1 Extinguishing media:

Suitable extinguishing media: Suitable extinguishing media: water spray, dry powder, foam  
Unsuitable extinguishing media:

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

Harmful vapours  
Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

#### 5.3 Advice for fire-fighters

Special protective equipment: Self-Contained Breathing Apparatus (SCBA) with chemical resistant gloves.

#### 5.4 Additional information

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

### 6 ACCIDENTAL RELEASE MEASURES

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

Use personal protective clothing. Information regarding personal protective measures see, chapter 8.

#### 6.2 Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

### 6.3 Methods and material for containment and cleaning up

For large amounts: Pump off product.

For residues: Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

### 6.4 Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

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| <b>7</b> | <b>HANDLING AND STORAGE</b> |
|----------|-----------------------------|

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|------------|--|--|
| <b>7.1</b> | Precautions for safe handling                                | Ensure there is sufficient ventilation of the area.  |
| <b>7.2</b> | Conditions for safe storage, including any incompatibilities | Store at normal room temperature and keep container tightly closed. Keep out of reach of children. No special precautions necessary for protection against fire and explosion. Store away from strong acids. |
| <b>7.3</b> | Precautions for safe handling                                | For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.   |

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| <b>8</b> | <b>EXPOSURE CONTROLS AND PERSONAL PROTECTION</b> |
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#### 8.1. Control parameters

Components with occupational exposure limits

No occupational exposure limits known.

#### 8.2. Exposure controls

Personal protective equipment

Respiratory protection:

Respiratory protection in case of vapour/aerosol release. Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

#### Hand protection:

Chemical resistant protective gloves (EN 374)

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): nitrile rubber (NBR) - 0.4 mm coating thickness.

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Manufacturer's directions for use should be observed because of great diversity of types.

#### Eye protection:

Tightly fitting safety goggles (cage goggles) (e.g. EN 166) and/ or face shield.

#### Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

#### General safety and hygiene measures

Wearing of closed work clothing is recommended. Handle in accordance with good industrial hygiene and safety practice.

#### *Recommended safety measures for handling the diluted product*

**Recommended maximum concentration (%):** 1

#### Appropriate engineering controls:

The product is intended to be used in closed systems. Use only in well ventilated areas.

#### Appropriate organisational controls:

No special requirements under normal use conditions.

#### Personal protective equipment

#### Eye / face protection:

Safety glasses are not normally required. However, their use is recommended in those cases where splashes may occur when handling the product.

**Hand protection:**

If the product is applied in a closed system, as recommended, no respiratory protection equipment will be required.

**Body protection:**

No special requirements under normal use conditions.

**Respiratory protection:**

If the product is applied in a closed system, as recommended, no respiratory protection equipment will be required.

**Environmental exposure controls:**

No special requirements under normal use conditions.

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|----------|---|
| <b>9</b> | <b>PHYSICAL AND CHEMICAL PROPERTIES</b> |
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**9.1. Information on basic physical and chemical properties**

|     |                                      |                |
|-----|--------------------------------------|----------------|
| (a) | Form                                 | Liquid         |
| (b) | Colour                               | Purple         |
| (c) | Odour                                | Distinctive    |
| (d) | pH value(1% solution)                | 7              |
| (e) | Melting point/range (°C):            | Not Determined |
| (f) | Initial boiling point/range (°C):    | Not Determined |
| (g) | Decomposition temperature (°C)       | Not Determined |
| (h) | Flash point (°C):                    | Not Determined |
| (i) | Ignition temperature (°C)            | Not Determined |
| (j) | Vapour pressure (hPa) at ...°C       | Not Determined |
| (k) | Vapour density (air=1)               | Not Determined |
| (l) | Density (g/cm <sup>3</sup> ) at 20°C | 1.0            |
| (m) | Bulk density (kg/m <sup>3</sup> )    | Not Determined |
| (n) | Water solubility (20°C in g/l)       | Completely     |
| (o) | Solubility(ies):                     | Not Determined |
| (p) | Partition coefficient                | Not Determined |
| (q) | Viscosity, dynamic (mPa s):          | Not Determined |

**9.2 Other information**

Incompatible with strong acids

|           |                                 |
|-----------|---------------------------------|
| <b>10</b> | <b>STABILITY AND REACTIVITY</b> |
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**10.1 Reactivity**

No hazardous reactions if stored and handled as prescribed/indicated.

**10.2 Chemical stability**

The product is stable if stored and handled as prescribed/indicated.

**10.3 Possibility of hazardous reactions**

No hazardous reactions when stored and handled according to instructions.

**10.4 Conditions to avoid**

See MSDS section 7 - Handling and storage.

**10.5 Incompatible materials**

Substances to avoid: Halogens, Acids, Reactive Chemicals

**10.6 Hazardous decomposition products**

No hazardous decomposition products known.

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|-----------|----------------------------------|
| <b>11</b> | <b>TOXICOLOGICAL INFORMATION</b> |
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**11.2.2 Mixtures**

No test data is available on the mixture.

Substance data, where relevant and available, are listed below

| Substance                        | Acute toxicity   | Skin corrosion/irritation                    | Serious eye damage/eye irritation | Respiratory or skin sensitisation                                       |
|----------------------------------|--|--|-----------------------------------|---|
| Didecyldimethylammonium Chloride | Oral, DL50: 238 mg/kg (rat)<br>Dermal, DL50: 3342 mg/kg (Rabbit) | Caustic effect on skin and mucous membranes. | Strong caustic effect.            | Buehler Test - Guinea pig<br>Result: negative (OECD Test Guideline 406) |

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

## 12 ECOLOGICAL INFORMATION

Do not allow product to reach ground water, water course or sewage system. The product contains materials that are harmful to the environment.

| Substance                        | Toxicity  | Persistence and Degradability | Bioaccumulative potential | Mobility in soil  |
|----------------------------------|---|-------------------------------|---------------------------|-------------------|
| Didecyldimethylammonium Chloride | Daphnia, CE50 (S): 0,011 - 0,099 mg/l<br>Daphnia, NOEC : 0,010 - 0,099 mg/l | Biodegradable                 | No Data Available         | No Data Available |

#### Results of PBT and vPvB assessment

The product does not fulfil the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative).

## 13 DISPOSAL

The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

**European Waste Catalogue:** 16 03 05\* - organic wastes containing dangerous substances.

Packaging may be reused or recycled after cleaning. If recycling is not possible, dispose according to the local regulations.

**Recommended cleansing agents:** Water, if necessary together with cleansing agents.

## 14 TRANSPORT INFORMATION

#### ADR, RID, ADN, IMO/IMDG, ICAO/IATA

|   |  |
|---|--|
| <b>14.1 UN number:</b>                    | 3082   |
| <b>14.2 UN proper shipping name:</b>      | Environmentally hazardous substance, liquid, n.o.s. (Didecyldimethylammonium Chloride) |
| <b>14.3 Transport hazard class(es):</b>   |  |
| <b>Class:</b>                             | 9  |
| <b>Label(s):</b>                          | 9  |
| <b>14.4 Packing group:</b>                | III  |
| <b>14.5 Environmental hazards:</b>        |  |
| <b>Environmentally hazardous:</b>         | Yes  |
| <b>Marine pollutant:</b>                  | Yes  |
| <b>14.6 Special precautions for user:</b> | None known.  |

#### **14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:**

The product is not transported in bulk tankers.

**Other relevant information:****ADR****Classification code:** M6**Tunnel restriction code:** E**Hazard identification number:** 90

## IMO/IMDG

**EmS:** F-A, S-F

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code. Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

**15 REGULATORY INFORMATION**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006

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

No data available

**15.2 Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

**16 OTHER INFORMATION**

This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application.

**Classification procedure**

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

**Abbreviations and acronyms:**

- STOT - Specific Target Organ Toxicity
- DNEL - Derived No Effect Limit
- EUH - CLP Specific hazard statement
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative
- ATE - Acute Toxicity Estimate

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