

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

1.1 Product identifier

Trade Names

ChloroSan - Environmental Disinfection Chlorine Releasing Granules 50%

| Substance name | Index Number | CAS number | REACH Registration No |
|----------------|--------------|------------|-----------------------|
| Mixture | N/A | N/A | N/A |

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

Use of the Substance/Mixture Chemical product for detergent free surface disinfection PT2. This product may be used as a Biocidal in accordance with EU Biocides Regulation 528/2012 (EU BPR) if the appropriate local authorisation/notification has been obtained, where applicable.

Exposure scenarios There are no exposure scenarios currently available or required specifically for the product.

Uses advised against This product is for use by professionals and trained personnel only.

1.3 Details of the supplier of the safety data sheet

| | | |
|---------------------------------|--------------------------------|-----------------|
| Company Name and Address | Telephone | 01573 226901 |
| Scotmas Limited | Fax | 01573 226026 |
| Solomon Way | Email Address of | |
| Pinnaclehill Ind Est, Kelso, | Competent Person | sds@scotmas.com |
| TD5 8DW, Scotland | Responsible for the SDS | |

1.4 Emergency telephone number


| | |
|-----------------------------------|-----------------------------|
| Emergency telephone number | 01573 226901 - Not 24 hours |
|-----------------------------------|-----------------------------|

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

| | |
|---|--|
| Physical and chemical hazards N/A | N/A |
| Human health Eye irritation, Category 2 Specific target organ - toxicity single exposure, Category 3, Respiratory system | H319: Causes serious eye irritation H335: May cause respiratory irritation |
| Potential environmental effects Acute aquatic toxicity, Category 1 Chronic aquatic toxicity category 1 | H400: Very toxic to aquatic life H410: Very toxic to aquatic life with long-lasting effects |
| Other classifications | |
| Most important adverse effects | |
| Human health | Irritating to eyes. Risk of serious damage to eyes. Specific target organ single exposure. Category 3. Respiratory system. See section 11 for toxicological information. |
| Physical and chemical hazards | May give off toxic gas on contact with acids See section 9 for physiochemical information. |
| Potential environmental effects | Very toxic to aquatic life with long-lasting effects. See section 12 for environmental information |

| 2.2 Label elements | | |
|--|---|---|
| Labelling according to Regulation (EC) No 1272/2008 | | |
| Hazard Pictogram(s) |  | |
| Signal word(s) | Warning | |
| Hazard statement(s) | H319 H335 H410 | Causes serious eye irritation. May cause respiratory irritation Very toxic to aquatic life with long lasting effects |
| Precautionary statement(s) | | |
| Prevention | P273 P280e | Avoid release to the environment Wear eye protection/face protection |
| Response | P305+ P351+ P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| Disposal | none | none |
| Other labelling information | | |
| | EUH031 | Contact with acid liberates toxic gas |
| Hazardous components must be listed on the on the label | Troclosene sodium | |
| 2.3. Other hazards | | |
| | Mixing this product with acid or ammonia release chlorine gas. Do not mix with bleach or other chlorinated products. For Results of PBT and vPvB assessment see section 12.5 | |

SECTION 3: COMPOSITIONAL INFORMATION ON INGREDIENTS**3.2. Mixtures**

| Chemical Nature | | Solid | | |
|-----------------------------|---------------------------|-------------------|--|--------------------------|
| Hazardous components | | Amount [%] | Classification (REGULATION (EC) No 1272/2008) | |
| | | | Hazard class / Hazard category | Hazard statements |
| Trosclosene Sodium | | >=50 - <=100 | Ox Sol. 2 | H272 |
| Index No | N/A | | Acute Tox. Oral. 4 | H302 |
| CAS No. | 2893-78-9 | | Eye Irrit.2 | H319 |
| EC No. | 220-767-7 | | STOT SE3 | H335 |
| REACH Registration No | 01-2119489371-33- 0008 | | Aquatic Acute. 1 | H400 |
| | | | Aquatic Chronic.1 | H410 |

For the full text of the H-Statements mentioned in this Section, see Section 16.

| SECTION 4: FIRST AID MEASURES | |
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| 4.1. Description of first aid measures | |
| General advice | |
| Inhalation of Vapour | Move to fresh air. Treat symptomatically. Get medical attention if symptoms occur. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention. |
| Skin contact | Rinse with plenty of water |
| Ingestion | Rinse mouth. Get medical attention if symptoms occur. |
| 4.2. Most important symptoms and effects, both acute and delayed | |
| Symptoms | See Section 11 for more detailed information on health effects and symptoms |
| Effects | See Section 11 for more detailed information on health effects and symptoms |
| 4.3. Indication of any immediate medical attention and special treatment needed | |
| Treatment | Treat symptomatically. |

| SECTION 5: FIREFIGHTING MEASURES | |
|---|--|
| 5.1. Extinguishing media | |
| Suitable extinguishing media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media | None known. |
| 5.2. Special hazards arising from the substance or mixture | |
| Specific hazards during fire fighting | Exposure to decomposition products may be a hazard to health. |
| Hazardous combustion products | Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus |
| 5.3. Advice for fire-fighters | |
| Special protective equipment for fire-fighters | Wear personal protective equipment. |
| Further information | Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes. |

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

| | |
|------------------------------------|--|
| Advice for non-emergency personnel | Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8. |
| Advice for emergency responders | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. |

6.2. Environmental precautions

| | |
|---------------------------|--|
| Environmental precautions | Do not allow contact with soil, surface or ground water. |
|---------------------------|--|

6.3. Methods and materials for containment and cleaning up

| | |
|---|---|
| Methods and materials for containment and cleaning up | Sweep up and shovel into suitable containers for disposal |
|---|---|

6.4. Reference to other sections

See Section 1 for emergency contact information.
For personal protection see section 8.
See Section 13 for additional waste treatment information.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

| | |
|-------------------------|---|
| Advice on safe handling | Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Use only with adequate ventilation. Wash hands thoroughly after handling. Mixing this product with acid or ammonia releases chlorine gas. Do not mix with bleach or other chlorinated products – will cause chlorine gas. |
| Hygiene measures | Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. |

| 7.2. Conditions for safe storage, including any incompatibilities | |
|--|---|
| Requirements for storage areas and containers | Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers. Never allow product to get in contact with water during storage |
| Advice on protection against fire and explosion | No specific advice |
| Advice on common storage | Do not store near acids. |
| Storage Temperature | 0 °C to 50 °C |
| 7.3. Specific end use(s) | |
| Specific use(s) | The identified uses for this product are detailed in Section 1.2. |

| SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION | |
|---|-----------------------------|
| 8.1. Control parameters | |
| Component: Sodium Carbonate CAS-No 497-19-8 | |
| Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL) | |
| Type of Application (Use): Workers Exposure routes: Inhalation Health Effect: Long term local effects | 10mg/m ³ |
| Type of Application (Use): Consumers Exposure routes: Inhalation Health Effect: Acute local effects | 10mg/m ³ |
| Component: Chlorine Gas CAS-No 497-19-8 | |
| Given of by the product before an after dilution Not an ingredient | |
| Work place exposure limit (WEL) | |
| Short-term exposure limit (15-minute reference period) | 0.5ppm 1.5mg/m ³ |

| 8.2 Exposure Controls | |
|---|--|
| Appropriate engineering controls | |
| Engineering Measures | Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards. |
| Respiratory protection (EN 143, 14387) | |
| Advice | When respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods |

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|---|--|
| | or procedures of work organization, consider the use of certified respiratory protection equipment meeting EU requirements (89/656/EEC, 89/686/EEC), or equivalent, with filter type:P |
| Hand protection (EN374) | |
| Advice | No special protective equipment required. |
| Eye/face protection (EN166) | |
| Advice | Safety glasses with side-shields |
| Skin and body protection (EN14605) | |
| Advice | No special protective equipment required. |
| Hygiene measures | |
| Advice | Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. |
| Environmental exposure controls | |
| General Advice | Consider the provision of containment around storage vessels. |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

| | | | |
|--|----------------|---|----------------|
| Form | Solid/granules | Colour | White |
| Odour | Chlorine | Vapour pressure | Not applicable |
| Odour Threshold | N/A | Relative vapour density | Not applicable |
| pH | 5.0-6.0 | Relative Density | Not applicable |
| Melting Point/ Freezing Point | Not applicable | Water solubility | Soluble |
| Initial Boiling Point and boiling range | Not applicable | Partition coefficient: n-octanol/water | Not applicable |
| Flash point | Not applicable | Auto ignition temperature | Not applicable |
| Evaporation rate | Not applicable | Decomposition temperature | Not applicable |
| Flammability (solid gas) | Not applicable | Viscosity dynamic | Not applicable |
| Upper explosion limit | Not applicable | Explosive properties | Not applicable |
| Lower explosion limit | Not applicable | Oxidising properties | Oxidising |
| 9.2 Other information | | | |
| None | | | |

SECTION 10: STABILITY AND REACTIVITY**10.1 Reactivity**

| | |
|--------|---|
| Advice | No dangerous reaction known under conditions of normal use. |
|--------|---|

10.2 Chemical stability

| | |
|--------|---------------------------------|
| Advice | Stable under normal conditions. |
|--------|---------------------------------|

10.3 Possibility of hazardous reaction

| | |
|---------------------|---|
| Hazardous reactions | Mixing this product with acid or ammonia releases chlorine gas. Do not mix with bleach or other chlorinated products – will cause chlorine gas. |
|---------------------|---|

10.4 Conditions to avoid

| | |
|---------------------|------------|
| Conditions to avoid | None known |
|---------------------|------------|

10.5 Incompatible materials

| | |
|--------------------|-------|
| Materials to avoid | Acids |
|--------------------|-------|

10.6 Hazardous decomposition products

| | |
|----------------------------------|--|
| Hazardous decomposition products | Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NO _x) Sulphur oxides Oxides of phosphorus |
|----------------------------------|--|

SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****Information on Product: Chlorosan Granules****Acute toxicity**

| | |
|-------------|---|
| Oral | Acute toxicity estimate : > 2,000 mg/kg |
|-------------|---|

| | |
|-------------------|--|
| Inhalation | Please find this information in the listing of the component/components below in this MSDS |
|-------------------|--|

| | |
|---------------|--|
| Dermal | Please find this information in the listing of the component/components below in this MSDS |
|---------------|--|

Irritation

| | |
|--------------------|--|
| Skin Result | Please find this information in the listing of the component/components below in this MSDS |
|--------------------|--|

| | |
|--------------------|--|
| Eyes Result | Please find this information in the listing of the component/components below in this MSDS |
|--------------------|--|

Sensitisation

| | |
|---------------|--|
| Result | Please find this information in the listing of the component/components below in this MSDS |
|---------------|--|

CMR effects

| | |
|---------------------------------------|--|
| Carcinogenicity | Please find this information in the listing of the component/components below in this MSDS |
| Mutagenicity | Please find this information in the listing of the component/components below in this MSDS |
| Teratogenicity | Please find this information in the listing of the component/components below in this MSDS |
| Reproductive toxicity | Please find this information in the listing of the component/components below in this MSDS |
| Specific target organ toxicity | |
| Single exposure | |
| Remark | Please find this information in the listing of the component/components below in this MSDS |
| Repeated exposure | |
| Remark | Please find this information in the listing of the component/components below in this MSDS |
| Other toxic properties | |
| Aspiration risk | |
| Remark | |

| Information on components - Trocloses Sodium CAS-No 2893-78-9 | |
|--|---|
| Acute toxicity | |
| Acute oral | LD50 rat: 1,500 mg/kg |
| Inhalation | Rat OECD 403 Acute toxicity inhalation (LC50 dust/mist mg/l) 0.27 Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing. |
| Dermal | LD50 rabbit: > 10,000 mg/kg |
| Irritation | |
| Skin Result | Product has a defatting effect on skin. May cause allergic contact eczema. Irritating to skin. Acute toxicity dermal (LD50 mg/kg) 5000 |
| Eyes Result | Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain. |
| Sensitisation | |
| Result | No data available |
| CMR effects | |
| Carcinogenicity | No data available |
| Mutagenicity | No data available |
| Teratogenicity | No data available |
| Reproductive toxicity | No data available |
| Specific target organ toxicity | |
| Single exposure | |
| Remark | No data available |
| Repeated exposure | |
| Remark | No data available |
| Other toxic properties | |
| Aspiration risk | |
| Remark | No data available |
| Human experience | |
| Inhalation Respiratory irritation, Cough Skin contact No data available Eye contact Redness, Pain, Irritation Ingestion No data available | |

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity****Information on product: Chlorine Granules**

Acute toxicity

| | |
|--|---|
| Fish | No product specific data. See information on components |
| Toxicity to Daphnia and other invertebrates | No product specific data. See information on components |
| Algae | No product specific data. See information on components |
| Product classification | Very toxic to aquatic life with long lasting effects. |

Information on components - Troclosen sodium CAS-No. 2893-78-9

Acute toxicity

| | |
|--|---|
| Fish | LC50 - Lepomis macrochirus (Bluegill) - 0.283 mg/l - 96 h |
| Toxicity to Daphnia and other invertebrates | EC50 - Daphnia magna (Water flea) - 0.15 mg/l - 48 h |
| Algae | No data |

| 12.2 Persistence and Degradability | |
|--|---|
| Information on Product: | |
| Biodegradability | |
| Result | The active ingredient Troclosene sodium is poorly biodegradable The surfactants contained in the product are biodegradable according to the requirements of the detergent regulation 648/2004/EC |
| Information on components – troclosene sodium CAS-No. 2893-78-9 | |
| Biodegradability | |
| Result | Poorly biodegradable |
| 12.3 Bioaccumulation Potential | |
| Information on Product – Chlorine granules | |
| Bioaccumulation | |
| Result | No data available |

| 12.4 Mobility in soil | |
|--|--|
| Information on product: | Chlorine granules |
| Mobility | |
| Soil | No data available |
| 12.5 Results of PBT and vPvB assessment | |
| Information on product: | Chlorine granules |
| Results of PBT and vPvB assessment | |
| Result | This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. |
| 12.6 Other adverse effects | |
| Additional ecological information | |
| No data available | |

SECTION 13: DISPOSAL CONSIDERATION**13.1 Waste treatment methods**

| | |
|--|---|
| Product | <p>The product should not be allowed to enter drains, water courses or the soil.</p> <p>Where possible recycling is preferred to disposal or incineration.</p> <p>If recycling is not practicable, dispose of in compliance with local regulations.</p> <p>Dispose of wastes in an approved waste disposal facility.</p> |
| Contaminated packaging | <p>Dispose of as unused product.</p> <p>Empty containers should be taken to an approved waste handling site for recycling or disposal.</p> <p>Do not re-use empty containers.</p> <p>Dispose of in accordance with local, state, and federal regulations.</p> |
| Guidance for Waste Code selection | <p>Organic wastes containing dangerous substances.</p> <p>If this product is used in any further processes, the final user must redefine and assign the most appropriate European Waste Catalogue Code. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable European (EU Directive 2008/98/EC) and local regulations.</p> |

SECTION 14: TRANSPORT INFORMATION**14.1 UN Number****UN3077****14.2 Proper shipping name**

| | |
|------|---|
| ADR | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (troclosene sodium) |
| ADN | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (troclosene sodium) |
| RID | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (troclosene sodium) |
| IMDG | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (troclosene sodium) |
| IATA | Environmentally hazardous substance, solid, n.o.s. (troclosene sodium) |

14.3 transport hazard class(es)

| | |
|---|---|
| ADR (Labels, Classification code, Hazard Identification No., Tunnel restriction code) | 9 |
| RID (Labels, Classification code, Hazard Identification No.) | 9 |
| IMDG (Labels EmS) | 9 |
| IATA | 9 |

14.4 Packing Group

| | |
|------|--------|
| ADR | PG III |
| ADN | PG III |
| RID | PG III |
| IMDG | PG III |
| IATA | PG III |

14.5 Environmental Hazards

| | |
|-----------------------------------|-----|
| ADR Labeling according to 5.2.1.8 | Yes |
|-----------------------------------|-----|

| | |
|---|----------------|
| ADN Labeling according to 5.2.1.8 | Yes |
| RID Labeling according to 5.2.1.8 | Yes |
| IMDG Labeling according to 5.2.1.6.3 | Yes |
| IMDG Classification as environmentally hazardous according to 2.9.3 | Yes |
| IATA | Yes |
| 14.6 Special precautions for user | |
| Not applicable | None |
| 14.7 Transport in Bulk according to annex II/MARPOL 73/78 and the IBC code | |
| IMDG | Not applicable |

SECTION 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 substance or mixture

According to Detergents Regulation EC 648/2004

30 % and more: Chlorine-based bleaching agents less than 5 %: Anionic surfactants

Contains: Disinfectants

Biocidal Product Regulations (EU) No. 528/2012

No authorisations or exemptions are currently required for placing the product on the market in the EU.

Notifications are required in some EU countries.

The product has been notified to the following member states competent authorities or can otherwise be placed on the market in the countries as indicated below.

United Kingdom: Notifications are not required in the UK

Other EU Directives:

Dangerous preparations directive (67/548/EEC) (1999/45/EC)

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

Biocidal Product Regulation (BPR, Regulation (EU) 528/2012)

REACH directive(2004/58/EC)

CLP regulations (2008/1272/EC)

| | |
|---|---|
| <p>National Regulations</p> <p>Take note of Dir 94/33/EC on the protection of young people at work.</p> | |
| <p>Other Regulations</p> | <p>The Chemicals (Hazard Information and Packaging for Supply) Regulations.</p> <p>The Control of Substances Hazardous to Health Regulations.</p> <p>Health and Safety at Work Act.</p> |
| <p>15.2 Chemical safety assessment</p> | |
| <p>This product contains substances for which Chemical Safety Assessments are still required.</p> | |

SECTION 16: OTHER INFORMATION

Issue information

| | |
|---|--|
| First issued 07/05/2020 Authorised by Kevin Ferguson | Issue 3 08/02/2021 Authorised by Kevin Ferguson |
|---|--|

Significant changes at this revision

Issue 3 – Change and clarification of exact trade name(s)

Full text of H- phrases for ingredients in section 2 and 3

- H272: May intensify fire; oxidiser.
- H302: Harmful if swallowed.
- H319: Causes serious eye irritation.
- H335: May cause respiratory irritation.
- H400: Very toxic to aquatic life.
- H410: Very toxic to aquatic life with long lasting effects.

Since the users working conditions are not known by us, the information on this safety data sheets is based on our current level of knowledge and on national and community regulations
 The product must not be used for any purpose other than those specified without first obtaining written handling instructions

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirement and local regulations.

The information given on this data sheet must be regarded as relating to the safety requirements relating to our products and not a guarantee of its properties

Observe all National, Federal and Local laws / Bylaws with regard to the use of this product. Always check with relevant regulatory authorities before use

Disclaimer

Information on this form is furnished in compliance with current legislation. It is the responsibility of the recipient to pass on this information to relevant departments/persons involved. Scotmas Limited assumes no responsibility for injury or death resulting from the use/misuse of this product by the recipient and/or third persons, however caused. The user, bailee and their respective employees and agents assume all such risks if reasonable safety procedures are not adhered to.