



AquaTreat Scale & Corrosive Inhibitor

Safety Data Sheet

1. Identification of Substance & Company

Product

| | |
|----------------------|---|
| Product name | AquaTreat Scale & Corrosive Inhibitor |
| HSNO approval | HSR002530 |
| Approval description | Cleaning Products (Subsidiary Hazard) Group Standard 2020 |
| UN number | NA |
| DG class | NA |
| Proper Shipping Name | NA |
| Packaging group | NA |
| Hazchem code | NA |
| Uses | Scale and corrosion inhibitor |

Company Details

| | |
|-----------|---|
| Company | GreenEarth Solutions Ltd |
| Address | PO Box 64-125 Botany Auckland 2163 New Zealand |
| Telephone | 0064 9 272 4141 |
| Email | mail@greeneearth.co.nz |
| Website | www.greeneearth.co.nz |

Emergency Telephone Number: 09 272 4141

2. Hazard Identification

Approval

This product has been approved under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR002530, Cleaning Products (Subsidiary Hazard) Group Standard 2020). The substance has been classified as hazardous according to the criteria in the Hazardous Substances (Hazard Classification) Notice 2020.

| GHS 7 Classes | Hazard Statements |
|-----------------|-------------------------------|
| Eye irrit cat 2 | H320 - Causes eye irritation. |

SYMBOLS

WARNING



| HSNO Classes | Hazard Statements |
|--------------|-------------------------------------|
| 6.3B | H316 - Causes mild skin irritation. |
| 6.4A | H320 - Causes eye irritation. |

Precautionary Statements

P103 - Read label before use.
P264 - Wash hands thoroughly after handling.
P280 - Wear eye 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.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P501 - Dispose of contents/container in accordance with local/regional/national/international regulation.



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3. Composition / Information on Ingredients

| Component | CAS/ Identification | Conc (%) |
|--|---------------------|----------|
| Organic acid | Proprietary | 10-30% |
| Ingredients not contributing to HSNO/GHS 7 classes | Proprietary | 10-30% |
| Water | 7732-18-5 | balance |

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

4. First Aid

General Information

If medical advice is needed, have product container or label at hand. You should call the National Poisons Centre if you feel that you may have been harmed or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).

Recommended first aid facilities Ready access to running water is required. Accessible eyewash is required.

Exposure

Swallowed Do NOT induce vomiting. Give a glass of water to drink. Contact a doctor if experiencing symptoms.

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin contact If skin irritation occurs: Get medical advice/ attention.

Inhaled IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor/physician if you feel unwell.

Advice to Doctor

Treat symptomatically

5. Firefighting Measures

Fire and explosion hazards: There are no specific risks for fire/explosion for this chemical. It is non-flammable.

Suitable extinguishing substances: Carbon dioxide, extinguishing powder or water jet. Fight larger fires with water jet or alcohol resistant foam.

Unsuitable extinguishing substances: Unknown.

Products of combustion: Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.

Protective equipment: No special measures are required.

Hazchem code: NA

6. Accidental Release Measures

Containment In all cases design storage to prevent discharge to storm water.

Emergency procedures If a significant spill occurs: Stop leak if safe/necessary; Isolate area. Collect spill – see below; Transfer to container for disposal. Dispose of according to guidelines below (Section 13).

Clean-up method Use absorbent (soil, sand or other inert material). Rags are not recommended for the clean-up of spills, as they may create fire or environmental hazard. Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

Disposal Mop up and collect recoverable material into labelled containers for recycling or salvage. Recycle containers wherever possible. This material may be suitable for approved landfill. Dispose of only in accord with all regulations.

Precautions No special protective clothing is normally necessary.

7. Storage & Handling

Storage Avoid storage of harmful substances with food. Store out of reach of children. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames. Avoid contact with incompatible substances as listed in Section 10.

Handling Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements.

8. Exposure Controls / Personal Protective Equipment

Workplace Exposure Standards


A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 3mg/m³ for respirable particulates and 10mg/m³ for inhalable particulates when limits have not otherwise been established.

| NZ Workplace Exposure Stds | Ingredient | WES-TWA* | WES-STEL |
|----------------------------|------------------|------------------------------|----------|
| | Propylene Glycol | 150ppm, 474mg/m ³ | NA |

Engineering Controls

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety at Work Act (2015) and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016. Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

Personal Protective Equipment

Eyes  Protect eyes with goggles, safety glasses or full face mask. Avoid wearing contact lenses.

Skin Avoid repeated or prolonged skin contact. Wear overalls, rubber boots and impervious gloves. Nitrile or rubber gloves are recommended. Replace frequently. Gloves should be checked for tears or holes before use. Remove protective clothing and wash exposed areas with soap and water prior to eating, drinking or smoking.

Respiratory A respirator when airborne concentrations approach the WES (section 8). Use a respirator with a organic vapour cartridge. If using a respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order.

WES Additional Information

Not applicable

9. Physical & Chemical Properties

| | |
|---|-----------------------------|
| Appearance | clear green liquid |
| Odour | mild odour |
| pH | no data |
| Vapour pressure | no data |
| Viscosity | no data |
| Boiling point | >100°C @760mmHg |
| Volatile materials | no data |
| Freezing / melting point | no data |
| Solubility | soluble in water |
| Specific gravity / density | 1.04 (H ₂ O = 1) |
| Flash point | not applicable |
| Danger of explosion | not explosive |
| Auto-ignition temperature | no data |
| Upper & lower flammable limits | no data |
| Corrosiveness | non corrosive |



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10. Stability & Reactivity

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|---|---|
| Stability | Stable |
| Conditions to be avoided | Containers should be kept closed in order to avoid contamination. Keep from extreme heat and open flames. |
| Incompatible groups | Strong bases, strong oxidisers |
| Substance Specific Incompatibility | none known |
| Hazardous decomposition products | Oxides of carbon |
| Hazardous reactions | none known |

11. Toxicological Information

Summary

IF SWALLOWED: may cause irritation of the mouth and throat.
 IF IN EYES: may cause eye irritation.
 IF ON SKIN: may cause mild skin irritation.
 IF INHALED: concentrated vapours may cause respiratory irritation.

Supporting Data

| | | |
|----------------|---|--|
| Acute | Oral | Using LD ₅₀ 's for ingredients, the calculated LD ₅₀ (oral, rat) for the mixture is >5,000 mg/kg. |
| | Dermal | No evidence of dermal toxicity. |
| Chronic | Inhaled | No evidence of acute inhalation toxicity. |
| | Eye | The mixture is considered to be an eye irritant. Organic acid may cause eye irritation. |
| | Skin | The mixture is not considered to be a skin irritant under GHS. |
| | Sensitisation | No ingredient present at concentrations > 0.1% is considered a sensitizer. |
| | Mutagenicity | No ingredient present at concentrations > 0.1% is considered a mutagen. |
| | Carcinogenicity | No ingredient present at concentrations > 0.1% is considered a carcinogen. |
| | Reproductive / Developmental Systemic Aggravation of existing conditions | No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation. No ingredient present at concentrations > 1% is considered a target organ toxicant. None known. |

12. Ecological Data

Summary

This mixture is not considered ecotoxic.

Supporting Data

| | |
|------------------------------------|---|
| Aquatic Bioaccumulation | Using EC ₅₀ 's for ingredients, the calculated EC ₅₀ for the mixture is > 100 mg/L. |
| Degradability | No data |
| Soil | No data |
| Terrestrial vertebrate | No evidence of soil toxicity. |
| Terrestrial invertebrate | This mixture is not considered harmful towards terrestrial vertebrates, see acute toxicity. |
| Biocidal | No evidence of toxicity towards terrestrial invertebrates. |
| Environmental effect levels | no data |
| | No EELs are available for this mixture or ingredients |

13. Disposal Considerations

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|-------------------------------|--|
| Restrictions | There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents. |
| Disposal method | Disposal of this product must comply with the Hazardous Substances (Disposal) Notice 2017 and the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. The substance must be treated and therefore rendered non-hazardous before discharge to the environment. |
| Contaminated packaging | Disposal of contaminated packaging must comply with the Hazardous Substances (Disposal) Notice 2017 clause 12. Ensure that the package is rendered incapable of |



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containing any substance and is disposed in a manner that is consistent with the requirements of the substance it contained and the material of the package. If possible reuse or recycle packaging.

14. Transport Information

There are no specific restrictions for this product (not a dangerous good).

| | | | |
|---------------------|----|------------------------------|----|
| UN number: | NA | Proper shipping name: | NA |
| Class(es) | NA | Packing group: | NA |
| Precautions: | NA | Hazchem code: | NA |

15. Regulatory Information

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO). Approval code: HSR002530, Cleaning Products (Subsidiary Hazard) Group Standard 2020.

Specific Controls

Key workplace requirements are:

| | |
|---------------------------------|---|
| SDS | To be available within 10 minutes in workplaces storing any quantity. |
| Inventory | An inventory of all hazardous substances must be prepared and maintained. |
| Packaging | All hazardous substances should be appropriately packaged including substances that have been decanted, transferred or manufactured for own use or have been supplied |
| Labelling | Must comply with the Hazardous Substances (Labelling) Notice 2017. |
| Emergency plan | Not required. |
| Certified handler | Not required. |
| Tracking | Not required. |
| Bunding & secondary containment | Not required. |
| Signage | Not required. |
| Location test certificate | Not required. |
| Flammable zone | Not required. |
| Fire extinguisher | Not required. |

Note: The above workplace requirements apply if only this particular substance is present. The complete set of controls for a location will depend on the classification and total quantities of other substances present in that location.

Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health and Safety at Work Act 2015 and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, local Council Rules and Regional Council Plans.

16. Other Information

Abbreviations

| | |
|------------------------|---|
| Approval Code | Approval HSR002530, Cleaning Products (Subsidiary Hazard) Group Standard 2020 Controls, EPA. www.epa.govt.nz |
| CAS Number | Unique Chemical Abstracts Service Registry Number |
| Ceiling | Ceiling Exposure Value: The maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time. |
| Controls Matrix | List of default controls linking regulation numbers to Matrix code (e.g. T1, I16). |
| EC₅₀ | Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species) |
| EPA | Environmental Protection Authority (New Zealand) |
| HAZCHEM Code | Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters |
| HSNO | Hazardous Substances and New Organisms (Act and Regulations) |
| IARC | International Agency for Research on Cancer |
| LEL | Lower Explosive Limit |
| LD₅₀ | Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats). |
| LC₅₀ | Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats) |
| MSDS (SDS) | Material Safety Data Sheet (or Safety Data Sheet) |
| STEL | Short Term Exposure Limit - The maximum airborne concentration of a chemical or |



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| TWA | biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours) |
| UEL | Upper Explosive Limit |
| UN Number | United Nations Number |
| WES | Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed during work hours (usually 8 hours, 5 days a week). The WES relates to exposure that has been measured by personal monitoring using procedures that gather air samples in the worker's breathing zone. |

References

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|--------------------------|---|
| Data | Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID). |
| Controls | EPA notices, www.epa.govt.nz , Health and Safety at Work (Hazardous Substances) Regulations 2017, www.legislation.govt.nz |
| WES | The latest edition NZ Workplace Exposure Standards , published by WorkSafe NZ and available on their web site – www.worksafe.govt.nz . |
| Other References: | Suppliers SDS |

Review

| Date | Reason for review |
|-----------|--------------------------|
| June 2021 | Not applicable – new SDS |

Disclaimer

This SDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The SDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the SDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO and GHS 7 classifications for this SDS have been estimated based on general information from the supplier (e.g., hazard, toxicological). This SDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the SDS author, email info@datachem.co.nz or phone: +64 9 940 30 80.

