

SAFETY DATA SHEET

Product Name: SoChlor Aqua Granules
Revision date: 26/06/2014
Supersedes: 05/03/2014

Revision: 9

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1

Identification of the substance/preparation

Product Name : SoChlor Aqua Granules

1.2

Use of the substance/preparation

Granules are used for surface disinfection.

1.3

Company/undertaking identification

Manufacturer : GV Health Ltd, 1 Centrus, Mead Lane, Hertford, Herts, SG13 7GX, UK
 Tel: +44 (0) 1920 463 098
 Fax: +44 (0) 1920 484 664
 e-mail: support@gvhealth.com

2. HAZARDS IDENTIFICATION

2.1

Classification of the substance or mixture Classification in accordance with Regulation (EC) No 1272/2008 [CLP/GHS]

Acute Tox. 4, H302 Harmful if swallowed
 Eye Irrit. 2 H319 Causes serious eye irritation
 STOT SE 3, H335 May cause respiratory irritation
 Aquatic Acute 1, H400 Very toxic to aquatic life
 Aquatic Chronic 1, H410 Very toxic to aquatic life with long lasting effects

Additional information

EUH031- Contact with acids liberates toxic gas

Classification in accordance with Directive 67/548/EEC

Harmful (Xn), R22: Harmful if swallowed
 Xi; R 36/37: Irritating to eyes and respiratory system.
 R31 Contact with acids liberates toxic gas.
 Dangerous for the Environment; (N) R 50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

2.2

Label elements

Labelling in accordance with the CLP Regulation EC (No) 1272/2008



Signal word:

Warning

Hazard statements

H302 - Harmful if swallowed
 H319 - Causes serious eye irritation
 H335 - May cause respiratory irritation
 H410 - Very toxic to aquatic life with long lasting effects
 EUH031- Contact with acids liberates toxic gas

SAFETY DATA SHEET

Product Name: SoChlor Aqua Granules
Revision date: 26/06/2014
Supersedes: 05/03/2014

Revision: 9

Precautionary statements

P261 - Avoid breathing dust/fumes
 P280 - Wear protective gloves/eye protection
 P273 - Avoid release to environment
 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
 P312 - Call a POISON CENTER or doctor/physician if you feel unwell
 P391 - Collect Spillage
 P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
 P501 - Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations

2.3 Other hazards None

3. COMPOSITION/INFORMATION ON INGREDIENTS.

Components	Weight %	Index No.	EC No.	EU Classification
Sodium Dichloroisocyanurate Dihydrate CAS No: 51580-86-0	90-100%	613-030-01-7	220-767-7	Acute Tox. 4 H302 Eye Irrit. 2 H319 STOT SE 3 H335 Aquatic Acute 1 H400 Aquatic Chronic 1 H410 EUH031 (In accordance with CLP 1272/2008) ----- R31 Xi; R36/37 Xn; R22 N; R50/53 (In accordance with DSD 67/548/EEC)
Sodium Chloride CAS no: 7647-14-5	0-1%		231-593-8	None

4. FIRST AID MEASURES.

4.1. Description of first aid measures

Eye contact Holding the eyelids apart, flush eyes promptly with copious flowing water for at least 20 minutes. Get medical attention immediately.

Skin contact Remove contaminated clothing. Wash skin thoroughly with mild soap and plenty of water for at least 15 minutes. Wash clothing before re-use. Get medical attention immediately.

Inhalation In case of dust inhalation or breathing fumes released from heated material, remove person to fresh air. Keep him quiet and warm and in a position comfortable for breathing. Apply artificial respiration if necessary and get medical attention immediately.

Ingestion If swallowed, wash mouth thoroughly with plenty of water and give water to drink. Get medical attention immediately.

NOTE: Never give an unconscious person anything to drink.

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



SAFETY DATA SHEET

Product Name: SoChlor Aqua Granules
Revision date: 26/06/2014
Supersedes: 05/03/2014

Revision: 9

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| - Ocular | Severe irritation and/or burns can occur following eye exposure. Contact may cause impairment of vision and corneal damage. |
| - Dermal | Dermal exposure can cause severe irritation and/or burns characterized by redness, swelling and scab formation. Prolonged skin exposure may cause permanent damage. |
| - Inhalation | Irritating to the nose, mouth, throat and lungs. It may also cause burns to the respiratory tract with the production of lung edema that can result in shortness of breath, wheezing, choking, chest pain, and impairment of lung function. Inhalation of high concentrations can result in permanent lung damage from the corrosive action to the lung. |
| - Ingestion | Irritation and/or burns can occur to the entire gastrointestinal tract, including the stomach and intestines, characterized by nausea, vomiting, diarrhea, abdominal pain, bleeding and/or tissue ulceration. Ingestion causes severe damage to the gastrointestinal tract with the potential to cause perforation. |

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

No specific antidote. Treat symptomatically and supportively.
In case of ingestion DO NOT induce vomiting.

Medical conditions aggravated by exposure Asthma, respiratory and cardiovascular disease.

5. FIRE-FIGHTING MEASURES.

5.1. Extinguishing media

Water

Do not use dry chemical extinguisher containing ammonia compounds.

5.2. Special hazards arising from the substance or mixture

When heated to decomposition, may release poisonous and corrosive fumes of nitrogen trichloride, chlorine and CO.

5.3. Advice for fire-fighters

Cool containers with water spray. Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) in positive pressure mode.

On small fires, use water spray or fog.

On large fires, use heavy deluge or fog streams. Flooding amounts of water may be required before extinguishment can be accomplished.

6. ACCIDENTAL RELEASE MEASURES.

6.1. Personal precautions, protective equipment and emergency procedures

For small spills in a well-ventilated area, wear a NIOSH approved half-face or full face tight fitting respirator or a loose fitting powered air purifying respirator equipped with chlorine cartridges. Chemical goggles should be worn when using a half-face respirator. In addition to respiratory protection, wear coveralls, chemical resistant gloves, chemical resistant footwear; and chemical resistant headgear for overhead exposure.

For clean-up of large spills, or small dry spills in confined areas, wear full-face respirator with chlorine cartridges or a positive pressure supplied air respirator.

Additionally, body protection should be impervious clothing covering entire body to prevent personal contact with material.

CAUTION - Protection concerns must also address the following: If this material becomes damp/wet or contaminated in a container, the formation of nitrogen trichloride gas may occur and an explosive condition may exist.

6.2. Environmental precautions

Prevent entry into sewers and watercourses

SAFETY DATA SHEET

Product Name: SoChlor Aqua Granules
Revision date: 26/06/2014
Supersedes: 05/03/2014

Revision: 9

6.3. Methods and materials for containment and cleaning up

Hazardous concentrations in air may be found in local spill area and immediately downwind. If spill material is still dry, do not put water directly on this product as a gas evolution may occur.

- **Soil** Do not contaminate spill material with any organic materials, ammonia, ammonium salts or urea. Clean up all spill material with clean, dry dedicated equipment and place in a clean dry container.
- **Water** This material is heavier than and soluble in water. Stop flow of material into water as soon as possible. Begin monitoring for available chlorine and pH immediately.
- **In air** Vapors may be suppressed by the use of water fog.

7. HANDLING AND STORAGE.

7.1. Precautions for safe handling

Avoid contact with skin, eyes, and clothing.
 Upon contact with skin or eyes, wash off with water.
 Wash hands thoroughly after handling
 Do not eat, drink or smoke when using this product.
 Use only outdoors or in a well-ventilated area

7.2. Conditions for safe storage, including any incompatibilities

Store in a dry, cool, well-ventilated area, away from incompatible materials (see Section 10). Do not store at temperatures above 60°C/140°F.. Store locked up.
 Product has an indefinite shelf-life limitation.

7.3. Specific end use(s)

Provided in sections 7.1, 7.2.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1. Control parameters

Components	Weight %	ACGIH-TLV Data	UK (WEL) - TWA	Netherlands national MAC data
Sodium Dichloroisocyanurate Dihydrate CAS No: 51580-86-0	90-100%	Not determined	Not determined	Not determined
Sodium Chloride CAS no: 7647-14-5	0-1%	Not determined	Not determined	Not determined

8.2. Exposure controls

Ventilation requirements

Use local exhaust ventilation to minimize dust and chlorine levels where industrial use occurs. Otherwise, ensure good general ventilation.

Personal protective equipment:

- **Respiratory protection** When dusty conditions are encountered, wear a NIOSH/OSHA full-face respirator with chlorine cartridges for protection against chlorine gas and dust/mist pre-filter.
- **Hand protection** Neoprene gloves
- **Eye protection** Use chemical safety glasses to avoid eye contact. Where industrial use occurs, chemical goggles may be required.
- **Skin and body protection** Impervious body covering clothes, boots and neoprene apron

SAFETY DATA SHEET

Product Name: SoChlor Aqua Granules
Revision date: 26/06/2014
Supersedes: 05/03/2014

Revision: 9

Hygiene measures	Safety shower and eye bath should be provided. Do not eat, drink or smoke until after-work showering and changing clothes.
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9. PHYSICAL AND CHEMICAL PROPERTIES.

9.1. Information on basic physical and chemical properties

Appearance	White granules or tablet-form product
Odour	Mild chlorine-like
pH	Not available
Melting point/range	Not applicable
Boiling point/range	Not applicable
Evaporation rate (ether=1)	Not applicable under standard conditions
Vapour pressure	Not applicable under standard conditions
Vapor density	Not applicable under standard conditions
Flash point	Not applicable
Density	Tap density = 0.974 g/mL pour density = 1.083 g/mL kg/L
Solubility:	
- Solubility in water	24-25 g/100g
Partition coefficient (n-octanol/water) Log Pow	-0.0056 (estimated)
Auto-ignition temperature	Not self-ignitable
Decomposition temperature	Begins to lose 1 mole water at approximately 50°C; second mole water at 95°C; Decomposes at 240-250°C
Viscosity	Not applicable
Explosive properties	Not available
Oxidising properties	Not oxidizing
Particle size:	Non- inhalable

10. STABILITY AND REACTIVITY.

- 10.1 Reactivity:** Begins to lose one mole of water at approximately 50°C
- 10.2 Chemical stability:** Stable under normal conditions
- 10.3 Possibility of hazardous reactions:** If this material becomes damp/wet or contaminated in a container, the formation of nitrogen trichloride gas may occur and an explosive condition may exist.
- 10.4 Conditions to avoid:** Do not package in paper or cardboard. Heating above 240 °C
- 10.5 Incompatible materials:** Organic materials, reducing agents, nitrogen containing materials, other oxidizers, acids, bases, oils, grease, sawdust, dry fire extinguishers containing monoammonium compounds.
- 10.6 Hazardous decomposition products:** Nitrogen trichloride, chlorine, carbon monoxide

11. TOXICOLOGICAL INFORMATION.

11.1 Information on toxicological effects

Acute toxicity:	
- Rat oral LD50	1671 mg/kg
- Rat dermal LD50	>5000 mg/kg
Serious eye damage/ irritation	Corrosive
Skin corrosion/irritation	Corrosive
Respiratory or skin sensitisation	Not a sensitizer



SAFETY DATA SHEET

Product Name: SoChlor Aqua Granules
Revision date: 26/06/2014
Supersedes: 05/03/2014

Revision: 9

Immediately Dangerous to Life or Health (IDLH)

Mutagenicity No level has been established for the components or the product itself.
Not mutagenic in five Salmonella strains with or without metabolic activation.

Carcinogenicity Not classified by IARC, OSHA, EPA.
Not included in NTP 11th Report on Carcinogens

Reproductive toxicity Sodium dichloroisocyanuric acid when given orally to pregnant mice from day 6 to day 15 of gestation, did not induce any significant teratogenic effects.

Specific Target Organ Toxicity (STOT) - Repeat exposure:

Chronic inhalation exposure may cause impairment of lung function and permanent lung damage.
In the 28 day extended to 59 day study drinking water study (rat): NOAEL= 115mg/kg bw/day

Medical conditions aggravated by exposure: Asthma, respiratory and cardiovascular disease.

12. ECOLOGICAL INFORMATION.

12.1 Toxicity

Aquatic toxicity:

- 96 Hour-LC50, Fish 0.22 mg/l (rainbow trout)
0.28 mg/l (bluegill sunfish)
- 48 Hour-LC50, *Daphnia magna* 0.2 mg/l

Avian toxicity:

- Oral LD50, Bobwhite quail 730 mg/kg
- Oral LD50, Mallard duck 3300 mg/kg
- Dietary LC50, Mallard duck >10,000 ppm
- Dietary LC50, Bobwhite quail >10,000 ppm

12.2 Persistence and degradability

Not readily biodegradable
Rapidly hydrolyses in water into Cyanuric acid

12.3 Bioaccumulative potential: Not expected to bioaccumulate

12.4 Mobility in soil: The degradation product, Cyanuric acid, is weakly adsorbed to and highly mobile in all soils

12.5 Results of PBT and vPvB assessment: Does not meet the criteria for PBT or vPvB assessment

12.6 Other adverse effects: None known

13. DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods

Waste disposal Care must be taken to prevent environmental contamination from the use of this material.
Dispose of in a safe manner in accordance with local/national regulations.

14. TRANSPORT INFORMATION.

Can be shipped as a limited quantity when packed in inner or single packs ≤ 5 kg. When packed in inner or single packs ≤ 5 kg, Special Provision 375 of 2013 UN Model Regulations for the transportation of dangerous goods (IATA Special Provision A197) exempts this product from the labelling and documentation provisions of Dangerous Goods Regulations

SAFETY DATA SHEET

Product Name: SoChlor Aqua Granules
Revision date: 26/06/2014
Supersedes: 05/03/2014

Revision: 9

ADR/RID UN No. 3077
 Proper shipping name: Environmentally hazardous substance, solid, n.o.s (Sodium Dichloroisocyanurate, dihydrate)
 Class: 9 - Miscellaneous Dangerous Substances and Articles
 Classification Code: M7
 Hazard identification No. 90
 Packing group: III
 Marking: Environmentally hazardous substance

IMO UN No. 3077
 Proper shipping name: Environmentally hazardous substance, solid, n.o.s (Sodium Dichloroisocyanurate, dihydrate)
 Class: 9 - Miscellaneous Dangerous Substances and articles
 Label: 9
 Mark: MARINE POLLUTANT
 Packing Group: III

ICAO/IATA UN No. 3077
 Proper shipping name: Environmentally hazardous substance, solid, n.o.s (Sodium Dichloroisocyanurate, dihydrate)
 Class: 9
 Hazard label(s): Miscellaneous
 Packing group: III
 Marking: Environmentally hazardous substance

15. REGULATORY INFORMATION.

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

EU	Sodium dichloroisocyanurate, dihydrate reported in EINECS
USA	All the components of this substance are listed on or are exempt from the inventory
Australia	Sodium dichloroisocyanurate, dihydrate listed in AICS
China inventory	Sodium dichloroisocyanurate, dihydrate listed
Japan	Sodium dichloroisocyanurate, dihydrate ENCS No. 5-1043X, 1-236
New Zealand Inventory	Sodium dichloroisocyanurate, dihydrate listed in NZIoC
Philippines	Sodium dichloroisocyanurate, dihydrate listed in PICCS

15.2 Chemical Safety Assessment: A Chemical Safety Assessment has been carried out on Sodium dichloroisocyanurate, dihydrate under the REACH Regulation.

16. OTHER INFORMATION.

The above information is intended to give general guidance as to health and safety. Whilst it is correct to the best of our knowledge and belief, no warranty can be given or implied that it will be adequate or applicable for all cases nor that the product will be suitable for any particular purpose since conditions of use are outside our control.

R phrases and Symbols used in Section 3

Xn Harmful	R22 Harmful if swallowed
	R31 Contact with acid liberates toxic gases



SAFETY DATA SHEET

Product Name: SoChlor Aqua Granules
Revision date: 26/06/2014
Supersedes: 05/03/2014

Revision: 9

Xi Irritant	R36/37 Irritating to Eyes and Respiratory System
N Dangerous for the Environment	R50/53 Very toxic to Aquatic Organisms. May cause long term effects in the aquatic environment.

GHS Classification used in Section 3

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
EUH031- Contact with acids liberates toxic gas

The inclusion of these phrases in Section 3 is mandatory according to Directive EC 1907/2006

REVISION NO: 9	DATE 26.06.2014
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REVISION HISTORY:

Revision No. 9 – Transport Information updated
Revision No. 8 – Updated P phrases for CLP requirements
Revision No. 7 – Updated for transport information
Revision No. 6 – Updated in accordance with Regulation (EC) No 1272/2008 [CLP/GHS]