

1. Product and Company Identification

www.rxmarine.com

Product Name Chloramine T trihydrate

Product Type RXSOL-61-6395-500

Company Details:

RX MARINE INTERNATIONAL

105, A wing , BSEL , TECH PARK.

VASHI ,NEW BOMBAY 400703 INDIA

Stock Point : Mumbai, Kandla, Kolkata, Chennai, Visakhapatnam, Fujairah, Muscat

Phone +91 22 65113333/ 5555 / 9999 / 27611360 / 27815540

Fax +91 22 2781 1318 ::AOH :0091 9322594669

Email mail@rxmarine.com

2. Composition / Information on ingredients

www.rxmarine.com

Substance

Formula CHO * H2O (Hill)

EC-No. 201-069-1

Molar mass 210.14 g/mol

Hazardous components (REGULATION (EC) No 1272/2008)

Chemical Name (Concentration)

CAS-No. Registration number Classification

Citric acid monohydrate (480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact). The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet.

Other protective equipment protective clothing:

Respiratory protection: required when dusts are generated.

Empfohlener Filtertyp: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Environmental exposure controls: Do not empty into drains.

9. Physical and chemical properties

www.rxmarine.com

Information on basic physical and chemical properties:

Form	solid
Colour	light yellow
Odour	slight chlorine
Odour Threshold	No information available.
pH	8 - 10 at 50 g/l 20 °C
Melting point	decomposes
Boiling point/boiling range	not applicable
Flash point	not applicable
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapour pressure	No information available.
Relative vapour density	No information available.

Density	No information available.
Relative density	No information available.
Water solubility	150 g/l at 25 °C
Partition coefficient: noctanol/water	log Pow: 0.84 (calculated)(anhydrous substance) Bioaccumulation is not expected. (Lit.)
Auto-ignition temperature	No information available.
Decomposition temperature	> 60 °C
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.
Oxidizing properties	none

Other data: Bulk density 540 - 680 kg/m³

10. Stability and reactivity

www.rxmarine.com

Reactivity: Risk of dust explosion

Chemical stability: releases water of crystallisation when heated. Possibility of hazardous reactions.

Violent reactions possible with: Metals, Oxidizing agents, Bases, Reducing agents

Conditions to avoid: Temperatures above melting point.

Incompatible materials: Metals

Hazardous decomposition products: no information available

11. Toxicological information

www.rxmarine.com

Acute oral toxicity

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach. Acute inhalation toxicity.

Symptoms: burns of mucous membranes, Cough, Shortness of breath, Possible damages:, damage of respiratory tract Acute dermal toxicity This information is not available.

Skin irritation: Mixture causes burns.

Eye irritation: Mixture causes serious eye damage. Risk of blindness!

Sensitisation: This information is not available.

Germ cell mutagenicity: This information is not available.

Carcinogenicity: This information is not available.

Reproductive toxicity: This information is not available.

Teratogenicity: This information is not available.

Specific target organ toxicity : single exposure This information is not available.

Specific target organ toxicity: repeated exposure This information is not available.

Aspiration hazard: This information is not available.

Further information: Substance which occurs in the human body under physiological conditions. Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

12. Ecological information

www.rxmarine.com

Toxicity to fish:

LC50 *Leuciscus idus* (Golden orfe): 440 - 760 mg/l; 96 h (anhydrous substance) (IUCLID) Toxicity to daphnia and other aquatic invertebrates

EC50 *E. sulcatum*: 485 mg/l; 72 h (anhydrous substance) (maximum permissible toxic concentration) (Lit.) EC50 *Daphnia magna* (Water flea): ca. 120 mg/l; 72 h (anhydrous substance) (IUCLID) Toxicity to algae IC50 *M. aeruginosa* 80 mg/l; 8 d (anhydrous substance) (maximum permissible toxic concentration) (Lit.)

Toxicity to bacteria

EC50 *Pseudomonas putida*: > 10,000 mg/l; 16 h (anhydrous substance) (Lit.)

Persistence and degradability: Biodegradability 98 %; 2 d OECD Test Guideline 302B (anhydrous substance) Readily eliminated from water

Biochemical Oxygen Demand (BOD) 481 mg/g (5 d) (External MSDS) Chemical Oxygen Demand (COD) 685 mg/g (External MSDS)

Theoretical oxygen demand (ThOD) 686 mg/g (Lit.)

Bioaccumulative potential: Partition coefficient: n-octanol/water log Pow: -1.72 (20 °C) OECD Test Guideline 117 (anhydrous substance)

Bioaccumulation is not expected.

Mobility in soil: No information available.

Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

Other adverse effects:

Additional ecological information: Harmful effect due to pH shift. Discharge into the environment must be avoided.

13. Disposal considerations

www.rxmarine.com

Disposal considerations:

Waste treatment methods: Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See for processes regarding the return of chemicals and containers, or contact us there if you have further questions

14. Transport information

www.rxmarine.com

Land transport (ADR/RID): Not classified as dangerous in the meaning of transport regulations.

Inland waterway transport (ADN): Not relevant

Air transport (IATA): Not classified as dangerous in the meaning of transport regulations.

Sea transport (IMDG): Not classified as dangerous in the meaning of transport regulations. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not relevant

15. Regulatory information

www.rxmarine.com

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

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

EU regulations

Major Accident Hazard

96/82/EC

Legislation

Directive 96/82/EC does not apply

Occupational restrictions
work.

Take note of Dir 94/33/EC on the protection of young people at

Regulation (EC) No 1005/2009 on substances that deplete
the ozone layer

not regulated

Regulation (EC) No 850/2004 of the European Parliament
and of not regulated the Council of 29 April 2004 on persistent
organic pollutants and amending Directive 79/117/EEC

not regulated

Regulation (EC) No 689/2008 concerning the export and import
of dangerous chemicals

not regulated

Substances of very high concern (SVHC)

This product does not contain substances of very high concern
according to Regulation (EC) No 1907/2006 (REACH), Article

57 above

the respective regulatory concentration limit of ? 0.1 % (w/w).

National legislation

Storage class

8B

Chemical Safety Assessment:

For this product a chemical safety assessment was not carried out.

16. Other information

www.rxmarine.com

Full text of H-Statements referred to under sections 2 and 3.

H314 Causes severe skin burns and eye damage.

Full text of R-phrases referred to under sections 2 and 3

R34 Causes burns.

Training advice:

Provide adequate information, instruction and training for operators.

Labelling (67/548/EEC or 1999/45/EC)

Symbol(s) C Corrosive

R-phrases 34 Causes burns.

S-phrases 26-36/37/39-45 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at surface water or the ground water system.