1. Product and Company Identifaction

www.rxmarine.com

Product Name TRICHLOROACETIC ACID AR 10% WV

Part Number RXSOL-60-6605-759

Company Details:

RX MARINE INTERNATIONAL 105, A wing , BSEL , TECH PARK. VASHI ,NEW BOMBAY 400703 INDIA

Branch: Kandla, Mumbai, Chennai, Vizag, Kolkata, UAE, OMAN, CANADA and KENYA

Phone +91 22 20871200 - 1400

Fax +91 22 27612100 :::AOH :0091 9821214367

Emailmail@rxmarine.comWebsitewww.rxmraine.comA

2. Composition / Information on ingredients

www.rxmarine.com

Chemical Name CAS EC number Weight Formula

Trichloroacetic acid 76-03-9 200-927-2 113 °C - closed cup

Evaporation Rate Not Applicable
Flammability (solid, gas) No data available
Explosive limits No Data Available
Upper/lower flammability or No data available

explosive limits

Autoignition temperature No data available Decomposition temperature No data available 1 hPa at 51 °C Vapour pressure 1,62 g/mL at 25 °C Density Relative Density No data available Relative vapor density 5,64 - (Air = 1.0)No data available Freezing point No data available Viscosity Partition coefficient No data available Explosive properties No data available Solubility 81,7 g/l at 20 °C

Ignition temperature No information available.

Particle characteristics No data available

10. Stability and reactivity

www.rxmarine.com

Reactivity

Forms explosive mixtures with air on intense heating. A range from approx. 15 Kelvin below the flash point is to be rated as critical. The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

Stability

The product is chemically stable under standard ambient conditions (room temperature) .

Possibility of hazardous reactions

Risk of explosion with: silver salt Exothermic reaction with: alkalines alkali hydroxides Amines Violent reactions possible with: Strong oxidizing agents sulfoxides dimethyl sulfoxide with Copper

Conditions to avoid

Incompatible materials

Hazardous decomposition products

Exposure to moisture. Heat. Strong heating.

No data available

In the event of fire: see section 5

11. Toxicological information

www.rxmarine.com

Acute toxicity

Skin corrosion/irritation

Serious eye damage/eye irritation Respiratory or skin sensitization

Toxic Effects on Human

Carcinogenicity

Germ cell mutagenicity

Reproductive toxicity

Specific target organ toxicity - single exposure Special Remarks on other Toxi Effects on Humans

Endocrine disrupting properties

LD50 Oral - Rat - 3.320 mg/kg Remarks: (IUCLID) Inhalation: No data available Dermal: No data available

Remarks: Causes severe burns. Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Remarks: Causes serious eye damage.

Maximization Test - Guinea pig Result: negative (OECD Test Guideline 406)

May cause damage to the following organs: upper respiratory tract. Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant, sensitizer), of ingestion, of inhalation (lung irritant, lung sensitizer).

No data available

In vivo tests did not show mutagenic effects Test Type: In vitro mammalian cell gene mutation test Test system: mouse lymphoma cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: Positive results were obtained in some in vitro tests. Test Type: Chromosome aberration test in vitro Test system: Human lymphocytes Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: positive Test Type: In vivo micronucleus test Species: Mouse Cell type: Bone marrow Application Route: Intraperitoneal Method: OECD Test Guideline 474 Result: negative

No data available

No data available

Acute Potential Health Effects: Skin: Causes skin irritation. May cause skin sensitization, an allergic reation, which becomes evident upon reexposure to this material. Eyes: Causes eye irritation. Ingestion: Causes gastrointestinal (digestive) tract irritation with nausea, vomiting, and diarrhea. May be harmful if swallowed. Inhalation: Causes respiratory tract irritation. May cause chemical pneumonitis and pulmonary edema, inflammation, edema of bronchi and larynx. Chronic Potential Health Effects: Repeated or prolonged skin exposure may cause allergic reactions in sensitive individuals. Repeated or prolonged exposure by inhalation may affect respiration and metabolism.

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. RTECS: AJ7875000 burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. Ecological information

www.rxmarine.com

Bioaccumulative potential

Persistence and degradability

Toxicity to fish

No data available

Biodegradability Result: 59 % - Not readily biodegradable. Remarks: (External MSDS)

Static test LC50 - Pimephales promelas (fathead minnow) - 77 mg/l - 96 h (OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates Static test EC50 - Daphnia magna (Water flea) - 57 mg/l - 48 h (OECD

Test Guideline 202)

Toxicity to algae NOEC - Selenastrum capricornutum (green algae) - 117 mg/l - 4 Days

Remarks: (ECHA)

Toxicity to bacteria EC50 - activated sludge - > 261 mg/l - 30 min Remarks: (ECHA)

Mobility in soil No Information available

Results of PBT and vPvB assessment

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.

Endocrine disrupting properties The substance/mixture does not contain components considered to have

endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission

Regulation (EU) 2018/605 at levels of 0.1% or higher.

Other adverse effects No data available

13. Disposal considerations

www.rxmarine.com

Disposal methods The material can be disposed of by removal to a licensed chemical

destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do

not discharge to sewer systems.

Contaminated packaging Dispose of as unused product.

Waste treatment Method No data available

14. Transport information

www.rxmarine.com

UN number ADR/RID: 1839 IMDG: 1839 IATA: 1839

UN proper shipping name ADR/RID: Trichloroacetic acid IMDG: Trichloroacetic acid

IATA: Trichloroacetic acid

Transport hazard class(es)

ADR/RID: 8 IMDG: 8 IATA: 8

Packaging group

ADR/RID: II IMDG: II IATA: II

Environmental hazards

ADR/RID: yes IMDG: yes IATA: NO

Further information No data available

15. Regulatory information

www.rxmarine.com

Safety, health and environmental regulations/legislation specific for the This material safety data sheet complies with the requirements of

substance or mixture National legislation Regulation (EC) No. 1907/2006.

C----- III. Direction 2012/19/EH -

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous

substances. E1 ENVIRONMENTAL HAZARDS

Other regulations

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

Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this substance.

16. Other information

www.rxmarine.com

Other Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and weassume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary

damages, howsoever arising, even if Rx Marine International has been advised of the possibility of such damages.

DISCLAIMER OF LIABILITY: The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.