

1. Product and Company Identification

www.rxmarine.com

Product Name Heat Exchanger Cleaner Caus

Part Number RXSOL-51-1308-026

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.com

Websitewww.rxmarine.com

2. Composition / Information on ingredients

www.rxmarine.com

ComponentsCASPercentage

Sodium Hydroxide solution1310-73-210-20

sodium toluene-4-sulphonate657-84-15-10

Phosphonate Mixture Detergent---2-5

Non Ionic Detergent Mixture---2-5

3. Hazards Identification

www.rxmarine.com

Signal Word Danger

Hazard StatementsH290 May be corrosive to metals. H314 Causes severe skin burns and eye damage.

Precautionary statements P234 Keep only in original packaging. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P363 Wash contaminated clothing before reuse.

Classification of the substance or mixtureNo data available

Supplemental Hazard StatementsNo data available

Other hazards 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. 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.

4. First Aid Measures

www.rxmarine.com

General adviceShow this material safety data sheet to the doctor in attendance

If inhaled After inhalation fresh air.

Eye Contact After eye contact: rinse out with plenty of water. Remove contact lenses.

Swallowed After swallowing: immediately make victim drink water (two glasses at most). Consult a physician. 4.2 Most important

Skin Contact In case of skin contact Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately

Inhalation No data available

Ingestion No data available

Most important symptoms and effects, both acute and delaye The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed No data available

5. Fire-fighting Measures

www.rxmarine.com

Flammability No data available

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture Sodium oxides Not combustible. Ambient fire may liberate hazardous vapours.

Further information Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system

Hazardous combustion products No data available

Advice for firefighters Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Protective Equipment No data available

Specific Hazards Arising from the Chemical No data available

6. Accidental Release Measures

www.rxmarine.com

Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

Spillage No data available

Personal Protection No data available

Environmental Precaution Do not let product enter drains. Risk of explosion.

Methods and materials for containment and cleaning Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

Reference to other sections For disposal see section 13.

7. Handling and Storage

www.rxmarine.com

Advice on protection against fire and explosion No data available

Incompatible materials No data available

Hygiene measures No data available

Advice on safe handling For precautions see section 2.2.

Conditions for safe storage including any incompatibilities

No data available

Storage conditions No metal containers. Tightly closed.

Storage class Storage class (TRGS 510) 8B Non-combustible, corrosive hazardous materials

Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Advice on general occupational hygiene No data available

8. Exposure controls and personal protection

www.rxmarine.com

Exposure controls Personal protective equipment

Engineering Control No data available

Eye/face protection Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Body Protection Protective clothing.

Skin protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested: Dermatrill® (KCL 740 / Aldrich Z677272, Size M) Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested: Dermatrill® (KCL 740 / Aldrich Z677272, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Respiratory protection

required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type ABEK 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.

Other Protection Measure No data available

9. Physical and chemical properties

www.rxmarine.com

Physical state Liquid

Colour Yellowish

Odour No data available

Odor Threshold No data available

pH 13-14

Melting Point No data Available

Boiling Point 105 - 140 °C

Flash Point>105

Evaporation RateNo data available

Flammability (solid, gas)No data available

Explosive limitsNo data Available

Upper/lower flammability or explosive limitsNo data available

Autoignition temperatureNo data available

Decomposition temperature No data available

Vapour pressure< 24 hPa at 20 °C

ViscosityNo data available

Density1.1 g/mL at 25 °C

Relative DensityNo data available

Specific GravityNo data available

Partition coefficientNo data available

Explosive propertiesNo data available

SolubilityNo data available

Ignition temperatureNo data available

Particle characteristicsNo data available

10. Stability and reactivity

www.rxmarine.com

Reactivity No data available

Chemical stabilityThe product is chemically stable under standard ambient conditions (room temperature)

Possibilityof hazardous reactionsNo data available

Conditions to avoidNo data available

Incompatible materials

Water, acids, Organic materials, Chlorinated solvents, Aluminum, Phosphorus, Tin/tin oxides, ZincMetals

Hazardous decomposition productsIn the event of fire: see section 5

11. Toxicological information

www.rxmarine.com

Acute toxicity Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract

Skin corrosion/irritationSkin - Rabbit Result: Causes burns. Remarks: (Regulation (EC) No 1272/2008, Annex VI)

Serious eye damage/irritationEyes - Rabbit Result: Causes serious eye damage. (OECD Test Guideline 405) Remarks: (Regulation (EC) No 1272/2008, Annex VI) Remarks: Causes serious eye damage

Respiratory or skin sensitization Patch test: - In vitro study Result: negative Remarks: (ECHA)

CarcinogenicityNo data available

Germ cell mutagenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure

Acute oral toxicity - If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. Acute inhalation toxicity - burns of mucous membranes, Cough, Shortness of breath, Possible damages: damage of respiratory tract

Additional Information 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. 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. Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

12. Ecological information

www.rxmarine.com

Persistence and degradability The methods for determining the biological degradability are not applicable to inorganic substances.

Toxicity to fish LC50 - *Gambusia affinis* (Mosquito fish) - 125 mg/l - 96 h Remarks: (ECOTOX Database)

Toxicity to daphnia and other aquatic invertebrates EC50 - *Ceriodaphnia* (water flea) - 40,4 mg/l - 48 h Remarks: (ECHA)

Toxicity No data available

Toxicity to bacteria EC50 - *Photobacterium phosphoreum* - 22 mg/l - 15 min Remarks: (External MSDS)

Toxicity to algae No data available

Products Biodegradation No data available

Mobility in soil No data 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

Product No data available

Contaminated packaging No data available

Waste treatment Method No data available

14. Transport information

www.rxmarine.com

UN number ADR/RID:1824 IMDG:1824

IATA:1824

UN proper shipping name ADR/RID:SODIUM HYDROXIDE SOLUTION IMDG:SODIUM HYDROXIDE SOLUTION IATA:SODIUM HYDROXIDE SOLUTION

Transport hazard class(es) ADR/RID:8 IMDG:8 IATA:8

Packaging groupADR/RID:II

IMDG:II IATA:II

Environmental hazardsADR/RID:No

IMDG:No

IATA:No

Special precautions for user Tunnel restriction code (E)

Further informationNo data available

15. Regulatory information

www.rxmarine.com

Safety, health and environmental regulations/legislation specific for the substance or mixtureThis material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Other regulationsTake note of Dir 94/33/EC on the protection of young people at workk.

Chemical Safety AssessmentA Chemical Safety Assessment was not 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 we assume 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 we 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.

No data available

No data available