Material Safety Data Sheet

Benzisothiazolinone BIT 85% (RXSOL-41-8936-025)

1. Product and Company Identifaction

Porduct Name	Benzisothiazolinone BIT 85%
Part Number	RXSOL-67-8936-050

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
Email	mail@rxmarine.com
Website	www.rxmraine.com

2. Composition / informationon ingredients

Substances

Formula	C7H5NOS
Molecular weight	151,19 g/mol
CAS-No.	2634-33-5
EC-No.	220-120-9
Index-No.	613-088-00-6

Component	Classification	Concentration
1,2-Benzisothiazolin-3-one CAS-No. 2634-33-5 EC-No 220-120-9 Index-No. 613-088-00-6	Acute Tox. 4; Skin Irrit. 2; Eye Dam. 1; Skin Sens. 1; Aquatic Acute 1; H302, H315, H318, H317, H400 Concentration limits: >= 0,05 %: Skin Sens. 1, H317; M-Factor - Aquatic Acute: 10	= 100 %
Index-No. CAS-No. EC-No. Index-No.		

For the full text of the H-Statements mentioned in this Section, see Section 16.

3. Hazards Identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008	Acute toxicity, Oral (Category 4), H302 Skin irritation (Category 2), H315 Serious eye damage (Category 1), H318 Skin sensitization (Category 1), H317 Short-term (acute) aquatic hazard (Category 1), H400.

Label elements

Signal word	Danger

Hazard Statements	H302 Harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H400 Very toxic to aquatic life.
Precautionary Statements	P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. P273 Avoid release to the environment. P280 Wear protective gloves/ eye protection/ face protection. P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. P302 + P352 IF ON SKIN: Wash with plenty of water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statements	None
Reduced Labeling (= 125 ml)	
Hazard statement(s)	H317 May cause an allergic skin reaction. H318 Causes serious eye damage.
Precautionary statement(s)	P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. P280 Wear protective gloves/ eye protection/ face protection. P302 + P352 IF ON SKIN: Wash with plenty of water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statements	None.
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.

4. First Aid Measures

Description of first aid measures

General advice	Show this material safety data sheet to the doctor in attendance.
If inhaled	After inhalation: fresh air.
In case of skin contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.
In case of eye contact	After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.
If swallowed	After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.
Most important symptoms and effects, both acute and delayed	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

Extinguishing media

Suitable extinguishing media	Water Foam Carbon dioxide (CO2) Dry powder
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture	Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Carbon oxides Combustible. Development of hazardous combustion gases or vapours possible in the event of fire.
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.
Further information	Prevent fire extinguishing water from contaminating surface water or the ground water system. spray to keep fire-exposed containers cool.Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
Environmental precautions	Do not let product enter drains.
Methods and materials for containment and cleaning up	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

Precautions for safe handling

Advice on safe handling	Work under hood. Do not inhale substance/mixture.
Hygiene measures	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities	
Storage conditions	Tightly closed. Dry.
Storage class	Storage class (TRGS 510): 8A: Combustible, corrosive hazardous materials
Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. Exposure controls and personal protection

Control parameters

Ingredients with workplace control parameters

Exposure controls

Personal protective equipment

Eye/face protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles
Skin protection	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 EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact Material: Chloroprene Minimum layer thickness: 0,65 mm Break through time: 480 min Material tested:KCL 720 Camapren® 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 EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: Latex gloves Minimum layer thickness: 0,6 mm Break through time: 60 min Material tested:Lapren® (KCL 706 / Aldrich Z677558, Size M).
Body Protection	Flame retardant antistatic protective clothing.
Respiratory protection	Recommended Filter type: Filter A-(P3) The entrepeneur 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.
Control of environmental exposure	Do not let product enter drains.

9. Physical and chemical properties

Physical state	Crystalline
Colour	Light yellow
Odor	No data available
Melting point/freezing point	Melting point/range: 154 - 158 °C - lit..
Initial boiling point and boiling range	328,7 °C at ca.1.013,25 hPa - Regulation (EC) No. 440/2008, Annex, A.2
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Flash point	Not applicable
Autoignition temperature	400 °C - Relative self-ignition temperature for solidsnot autoflammable
Decomposition temperature	No data available
pH	No data available materials.Extremely flammable in the presence of the following materials or conditions: oxidizing materials.
Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
Water solubility	1.153 g/l at 20 °C - Regulation (EC) No. 440/2008, Annex, A.6
Partition coefficient: n-octanol/water	Log Pow: 0,63 - 0,76 at 20 °C - Regulation (EC) No. 440/2008, Annex, A.8 - Bioaccumulation is not expected.
Vapor pressure	0,0001 hPa at 25 °C - Regulation (EC) No. 440/2008, Annex, A.4
Density	No data available
Relative density	1,48 at 20 °C - Regulation (EC) No. 440/2008, Annex, A.3
Relative vapor density	No data available
Particle characteristics	No data available
Explosive properties	No data available
Oxidizing properties	None
Other safety information	

Surface tension	72,6 mN/m at 20 °C - Regulation (EC) No. 440/2008, Annex, A.5

10. Stability and reactivity

Reactivity	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.
Chemical stability	The product is chemically stable under standard ambient conditions (room temperature)
Possibility of hazardous reactions	Violent reactions possible with: Oxidizing agents Bases Reducing agents
Conditions to avoid	No information available
Incompatible materials	No data available
Hazardous decomposition products	In the event of fire: see section 5

11. Toxicological information

Information on toxicological effects

Acute toxicity	LD50 Oral - Rat - male and female - 670 mg/kg (OECD Test Guideline 401) Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2) Inhalation: No data available LD50 Dermal - Rat - male and female - > 2.000 mg/kg (OECD Test Guideline 402)
Skin corrosion/irritation	Skin - Rabbit Result: irritating - 4 h Remarks: (ECHA) Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)
Serious eye damage/eye irritation	Eyes - Rabbit Result: Causes serious eye damage. Remarks: (ECHA) Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)
Respiratory or skin sensitization	Maximization Test - Guinea pig Result: Causes sensitization. (OECD Test Guideline 406) Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)
Germ cell mutagenicity	Test Type: gene mutation test Test system: mouse lymphoma cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative Test Type: Ames test Test system: S. typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative 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: unscheduled DNA synthesis assay Species: Rat Application Route: Oral Method: OECD Test Guideline 486 Result: negative Test Type: Micronucleus test Species: Mouse Cell type: Bone marrow Application Route: Oral Method: OECD Test Guideline 474 Result: negative
Carcinogenicity	No data available

Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available

12. Ecological information

Persistence and degradability	No data available
Toxicity to fish	Static test LC50 - Oncorhynchus mykiss (rainbow trout) - 75 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	Static test EC50 - Daphnia magna (Water flea) - 42,81 mg/l - 48 h (OECD Test Guideline 202) Remarks: (in analogy to similar products) The value is given in analogy to the following substances: maleic acid
Toxicity	Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 1.520 mg/l - 96 h
Toxicity to bacteria	EC10 - Bacteria - 14 mg/l - 72 h Remarks: (Lit.) EC5 - E.coli - 15.000 mg/l Remarks: (Lit.) (maximum permissible toxic concentration)
Toxicity to algae	Static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 74,35 mg/l - 72 h (OECD Test Guideline 201) Remarks: (in analogy to similar products) The value is given in analogy to the following substances: maleic acid
Products Biodegradation	The methods for determining the biological degradability are not applicable to inorganic substances.
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	No data available
Other adverse effects	No data available .

13. Disposal considerations

Waste treatment Method	
Product	See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

14. Transport information

UN number	ADR/RID:3077 IMDG:3077 IATA: 3077
UN proper shipping name	ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1,2-Benzisothiazolin-3-one) IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1,2-Benzisothiazolin-3-one) IATA: Environmentally hazardous substance, solid, n.o.s. (1,2-Benzisothiazolin-3-one)
Transport hazard class(es)	ADR/RID: 9 IMDG: 9 IATA:9
Packaging group	ADR/RID: III IMDG: III IATA:III
Environmental hazards	ADR/RID: No IMDG: No IATA: No
Special precautions for user	No data available
Further information	Not classified as dangerous in the meaning of transport regulations.

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture	This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.
Other regulations	Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable. Take note of Dir 94/33/EC on the protection of young people at work.
Chemical Safety Assessment	For this product a chemical safety assessment was not carried out

16. 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.

Other Information

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