

1. Product and Company Identifaction

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Product Name BIOCIDE 6111
Part Number RXSOL-81-8192-105

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

Stock Point ::: Mumbai, Kandla, Kolkata, Chennai, Vizag, Fujairah, Muscat, Nairobi

Phone +91 22 65113333 / 5555 / 9999
Fax +91 22 2781 1318 ::AOH :0091 9821214367
Email 123@rxmarine.com
Website www.rxmarine.com

2. Composition / Information on ingredients

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Name of Substance	Cas Number	Weight Percentage
Glutaraldehyde	111-30-8	20-30%
2-methyl-4-isothiazolin-3-one	1003-07-2	10-15%
Non Hazardous Proprietary Ingredient including stabilizing agents	Proprietary	75 to 85

3. Hazards Identification

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Signal Word	Warning
Hazard Statements	H302 + H332 Harmful if swallowed or if inhaled. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H410 Very toxic to aquatic life with long lasting effects. EUH071 Corrosive to the respiratory tract
Precautionary statements - prevention	P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Precautionary statements - response	P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308 + P310 IF exposed or concerned: immediately call a POISON CENTER or doctor/ physician.

4. First Aid Measures

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Eye Contact Check for and remove any contact lenses. In case of contact, immediately

Skin Contact	flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.
Inhalation:	In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Ingestion:	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.
Notes to Physician	Do not induce vomiting. Obtain medical attention. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

5. Fire-fighting Measures

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Flammability	Non-Flammable.
Flash Point	Not Applicable.
Suitable extinguishing media	No Information Available
Hazardous combustion products	When Heated to decomposition, it emits acrid smoke and fumes.
Protective Equipment	Use personal protective equipment.
Specific Hazards Arising from the Chemical	Not considered to be a significant fire risk.

6. Accidental Release Measures

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Small Spillage	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements
Personal Protection	Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: Protective equipment see section 8.
Environmental Precaution	Do not let product enter drains.
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

7. Handling and Storage

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Handling	Do not ingest. Do not breathe dust. Avoid contact with eyes. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatible substances such as oxidizing agents, acids.
Storage	Light Sensitive. Refrigerate. Store in light-resistant containers. Keep containers tightly closed. Keep containers in a cool, well-ventilated area. Packing: Only packagings which are approved (e.g. acc. to ADR) may be used.
Advice on general occupational hygiene	Advice on safe handling. Observe label precautions. Change contaminated clothing. Wash hands after working with substance.

8. Exposure controls and personal protection

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Engineering Control	Provide exhaust ventilation or other engineering controls to keep the
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Personal Protection

Other Protection Measure

Exposure Limit

airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Eye/face Protection : Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection : Wear appropriate protective gloves and clothing to prevent skin exposure. **Respiratory Protection :** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator exposure limits are exceeded or if irritation or other symptoms are experienced.

Handle in accordance with good industrial hygiene and safety practice.

Glutaraldehyde TWA: 0.2 (ppm) [Australia] TWA: 0.75 (mg/m³) [Australia] TWA: 0.25 CEIL: 0.2 (ppm) from NIOSH CEIL: 0.2 (ppm) from OSHA (PEL) [United States] TWA: 0.05 STEL: 0.05 (ppm) [United Kingdom (UK)] Consult local authorities for acceptable exposure limits.



Gloves Suit

9. Physical and chemical properties

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Form	Liquid
Colour	Clear
Odour	Pungent
Odor Threshold	No Information Available
pH	3-5
Freezing Point	-7 °C
Boiling Point	101°C
Flash Point	None ASTM D 56
Evaporation Rate	0.8 Calculated.
Flammability (solid, gas)	No Data Available
Explosive limits	No Data Available
Vapour pressure	21 hPa at 20 °C
Vapour Density	>1.1
Relative density Information	1.05-1.10 at 25 °C
Partition coefficient	No data available
Explosive properties	None
Solubility	Soluble in water
Ignition temperature	275 °C

10. Stability and reactivity

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Recativity

Forms explosive mixtures with air on intense heating.

Stability

Product is stable.

Possibility of hazardous reactions

Violent reactions possible with: Amines, Strong oxidizing agents
Violent polymerisation may be caused by: Strong bases, Strong acids

Conditions to avoid
Incompatible materials
Hazardous Polymerization

Strong Heating
Aluminium, various metals, Mild steel
Hazardous polymerization does not occur.

11. Toxicological information

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Rout Of Entry
Toxicity to Animal

Absorbed through skin. Eye contact. Inhalation. Ingestion.
WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 100 mg/kg [Mouse]. Acute dermal toxicity (LD50): >2500 mg/kg [Rat]. Acute toxicity of the vapor (LC50): 480 mg/m 4 hours [Rat]. 3

Toxic Effects on Humans

CARCINOGENIC EFFECTS: Classified A4 (Not classifiable for human or animal.) by ACGIH [Glutaraldehyde]. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Glutaraldehyde]. Mutagenic for bacteria and/or yeast. [Glutaraldehyde]. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Reproductive system/toxin/male SUSPECTED [Glutaraldehyde]. Contains material which may cause damage to the following organs: blood, the reproductive system, liver, mucous membranes, spleen, central nervous system (CNS), Urinary system.

Special Remarks on other Toxic Effects on Humans:

Potential Health Effects: Eye: Causes severe eye irritation. May cause eye injury or chemical conjunctivitis. Skin: Causes moderate to severe skin irritation. It may be absorbed through the skin, although poorly. May cause allergic contact dermatitis with itching and skin rash. May cause staining of the skin and nails to a brown or golden brown color. Ingestion: Harmful if swallowed. May cause severe irritation of the digestive tract with burning sensation in the chest, abdominal pain, cramping, vomiting, diarrhea (perhaps bloody diarrhea), vascular collapse, and coma. May also affect liver (increased liver enzymes, liver damage), spleen, blood (normocytic anemia), metabolism (weight loss), behavior (somnolence, excitement, dizziness, lethargy, ataxia, seizures), metabolism (weight loss), urinary system (abnormal renal function, anuria) Inhalation: Harmful if inhaled. Can cause respiratory tract irritation and sudden headaches.

12. Ecological information

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Eco Toxicity
COD and BOD 5
Products of Biodegradation:
Mobility in soil
Results of PBT and vPvB assessment
Other adverse effects

Not Available
Not Available
No Information available
No Information available
Substance(s) in the mixture do(es) not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII, or a PBT/vPvB assessment was not conducted..
Discharge into the environment must be avoided.

13. Disposal considerations

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Waste Treatment Method

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself

14. Transport information

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DOT

UN Number	UN 3265
Proper shipping name	CORROSIVE LIQUID, N.O.S. (GLUTARDIALDEHYDE SOLUTION)
Hazard Class	8
Packing group	III

TDG

UN Number	UN 3265
Proper shipping name	CORROSIVE LIQUID, N.O.S. (GLUTARDIALDEHYDE SOLUTION)
Hazard Class	8
Packing group	III

IATA

UN Number	UN 3265
Proper shipping name	CORROSIVE LIQUID, N.O.S. (GLUTARDIALDEHYDE SOLUTION)
Hazard Class	8
Packing group	III

IMDG/IMO

UN Number	UN 3265
Proper shipping name	CORROSIVE LIQUID, N.O.S. (GLUTARDIALDEHYDE SOLUTION)
Hazard Class	8
Packing group	III

15. Regulatory informationwww.rxmarine.com**Federal and State Regulation**

Pennsylvania RTK: Glutaraldehyde Florida: Glutaraldehyde
Massachusetts RTK: Glutaraldehyde New Jersey: Glutaraldehyde
California Director's list of Hazardous Substances: Glutaraldehyde TSCA
8(b) inventory: Glutaraldehyde; Water TSCA 8(a) PAIR: Glutaraldehyde
TSCA 8(d) H and S data reporting: Glutaraldehyde: 9/30/91 to 9/30/01

Other Regulation

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

WHMIS (Canada)

CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC). CLASS D-2B: Material causing other toxic effects (TOXIC). CLASS E: Corrosive liquid.

DSCL (EEC)

R36- Irritating to eyes. S2- Keep out of the reach of children. S24/25- Avoid contact with skin and eyes. S46- If swallowed, seek medical advice immediately and show this container or label.

HMIS

Health Hazard	: 1
Fire Hazard	: 0
Reactivity	: 0
Personal Protection	: H

Fire :

Health Hazard	: 1
Fire Hazard	: 0
Reactivity	: 0
Specific Hazard	: H

16. Other information

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Other Information

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