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

Email123@rxmarine.comWebsitewww.rxmarine.com

2. Composition / Information on ingredients

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Name of Substance Cas Number Weight Percentage

Sodium Bromide7647-15-69%Sodium Hypochlorite7681-52-96%Non Hazardous Proprietory Ingredient includingProprietory75 to 85

stabilizing agents

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

flush eyes with plenty of water for at least 15 minutes. Cold water may be

used. Get medical attention immediately.

Skin Contact 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.

Move to fresh air. If breathing is difficult, give oxygen. Get medical Inhalation:

attention immediately if symptoms occur.

Do not induce vomiting. Obtain medical attention. If vomiting occurs, lean Ingestion:

patient forward or place on left side (head-down position, if possible) to

maintain open airway and prevent aspiration.

Notes to Physician Treat symptomatically

5. Fire-fighting Measures

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Flammability Non-Flammable. Flash Point Not Applicable.

Suitable extinguishing media No Information Available

Hazardous combustion When Heated to decomposition, it emits acrid smoke and fumes.

products

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 Cover drains. Collect, bind, and pump off spills. Observe possible containment and cleaning

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

incompatibles such as oxidizing agents, acids.

Storage Light Sensitive. Refrigerate. Store in light-resistant containers. Keep

containers tightly closed. Keep containers in a cool, wellventilated 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

Personal Protection

Other Protection Measure Exposure Limit

The state of the s

Gloves Suit

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.

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 $^{\circ}$ C Boiling Point 101 $^{\circ}$ 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 Stability

Possibility of hazardous reactions

Forms explosive mixtures with air on intense heating.

Product is stable.

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

Incompatible materials Aluminium, various metals, Mild steel
Hazardous Polymerization Hazardous polymerization does not occur.

11. Toxicological information

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Rout Of Entry Absorbed through skin. Eye contact. Inhalation. Ingestion.

Toxicity to Animal 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 reneal function, anuria) Inhalation: Harmful if inhaled. Can cause respiratory tract irritation and sudden headaches.

12. Ecological information

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Eco Toxicity Not Available

COD and BOD 5 Not Available
Products of Biodegradation: No Information available

Mobility in soil

No Information available

Results of PBT and vPvB assessment

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..

Other adverse effects 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 information

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Fedral 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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