

Product Name	Biocide MicroSolv
Part Number	RXSOL-43-1196-250

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, Kenya Africa, Canada

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

Name of Substance	Cas Number	EC Number	Wight %	Glutaraldehyde	111-30-8
203-856-5	30-40% Proprietary Blend of Biocides	-	-	>60 %	

Signal Word	Danger	Hazard Statements	H302 + H332 Harmful if swallowed or if inhaled.
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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.
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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.

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15
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minutes. Cold water may be used. Get medical attention immediately. Skin Contact In case of contact, immediately flushes 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. Inhalation: Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur. Ingestion: 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. Notes to Physician

Treat symptomatically

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.		

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. Enviromental 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

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.

Engineering Control Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location. Personal Protection

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. Other Protection Measure Handle in accordance with good industrial hygiene and safety practice. Exposure Limit Glutaraldehyde TWA: 0.2 (ppm) [Australia] TWA: 0.82 (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

Form	Liquid	Colour	Clear	Odour	Pungent	Odor Threshold	No Information Available
pH	3.5 - 4.5	Freezing Point	-13 °C	Boiling Point	101°C	Flash Point	Not Applicable
Evaporation Rate	Not Applicable	Flammability (solid, gas)	No Data Available	Explosive limits	No Data Available		
Vapour pressure	21 hPa at 20 °C	Vapour Density	0.8	Relative density	Information	1.10	at 25 °C
Partition coefficient	No data available	Explosive properties	None	Solubility	Soluble in water	Ignition	
temperature	275 °C						

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

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.

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.				

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

DOT

UN	Number	UN1307	Proper shipping name	CORROSIVE LIQUID, N.O.S.
(GLUTARDIALDEHYDE				
SOLUTION)	Hazard Class	8	Packing group	II

TDG

UN	Number		UN1307	Proper shipping name	CORROSIVE LIQUID, N.O.S.
(GLUTARDIALDEHYDE					
SOLUTION)	Hazard Class	8	Packing group	II	

IATA

UN	Number		UN1307	Proper shipping name	CORROSIVE LIQUID, N.O.S.
(GLUTARDIALDEHYDE					
SOLUTION)	Hazard Class	8	Packing group	II	

IMDG/IMO

UN	Number		UN1307	Proper shipping name	CORROSIVE LIQUID, N.O.S.
(GLUTARDIALDEHYDE					
SOLUTION)	Hazard Class	8	Packing group	II	

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	: 2	Fire Hazard	: 0	Reactivity	: 0	Personal
Protection		: H					

Fire :	Health Hazard	: 2	Fire Hazard	: 0	Reactivity	: 0	Specific
Hazard		: H					

Other Information

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