

## 1. Product and Company Identification

www.rxmarine.com

Product Name RXSOL-16-1698-025  
Product Type Pickling Inhibitor RXSOL 31 A  
HS CODE 34029019

### Company Details:

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

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## 2. Composition / Information on ingredients

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Hazardous components	CAS NUMBER	%
Pyridine, alkyl derivatives	Proprietary	30 - 60
1,3-Diethyl-2-thiourea	105-55-5	10 - 30
Sulfuric acid	7664-93-9	10 - 30
Alkylphenol Ethoxylate	Proprietary	1 - 5
Proprietary Blend	Mixture	10-20

## 3. Hazards Identification

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	<b>EMERGENCY OVERVIEW</b>
	<b>HMIS:</b>
<b>Physical state:</b> Liquid	<b>HEALTH: *3</b>
<b>Color:</b> Dark brown	<b>FLAMMABILITY: 0</b>
<b>Odor:</b> Pungent	<b>PHYSICAL HAZARD: 1</b>
	<b>Personal Protection:</b> See MSDS Section 8

**DANGER** **CORROSIVE!**: CAUSES EYE, SKIN AND RESPIRATORY TRACT BURNS. POSSIBLE CANCER HAZARD.

**Relevant routes of exposure:** Skin, Inhalation, Eyes

### Potential Health Effects

**Inhalation:** Mists, vapors or liquid may cause severe irritation or burns. Excessive inhalation of this material causes headache, dizziness, nausea and incoordination.

**Skin contact:** Corrosive to the skin. Contact with the skin or mucous membranes may cause severe irritation and burns. This product may cause an allergic skin reaction. A component in this product may be absorbed through the skin in harmful amounts.

**Eye contact:** This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness.

**Ingestion:** This product may produce corrosive damage to the gastrointestinal tract if it is swallowed. May cause dizziness, incoordination, headache, nausea, and vomiting.

**Existing conditions aggravated by exposure:** Eye, skin and respiratory disorders.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). See Section 11 for additional toxicological information.

## 4. First Aid Measures

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Inhalation:	If mist or vapor of this product is inhaled, remove person immediately and seek medical attention if symptoms develop or persist.
Skin contact:	Remove contaminated clothing and footwear. For skin contact flush with water. If symptoms develop and persist, get medical attention.
Eye contact:	In case of contact with the eyes, rinse immediately with plenty of water and seek immediate medical attention.
Ingestion:	Get immediate medical attention. Do not induce vomiting. Give oral water or milk. Never give anything by mouth to a victim who is unconscious or having convulsions.
Notes to physician:	Treat symptomatically and supportively.

## 5. Fire-fighting Measures

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Flash point:	Not applicable
Autoignition temperature:	Not applicable
Flammable/Explosive limits - lower:	Not applicable
Flammable/Explosive limits - upper:	Not applicable
Extinguishing media:	Use media appropriate for surrounding material.
Special firefighting procedures:	Wear full protective clothing. Wear self-contained breathing apparatus.
Unusual fire or explosion hazards:	This product is an aqueous mixture which will not burn. May react with strong oxidizers to form flammable hydrogen gas.
Hazardous combustion products:	Irritating and toxic gases or fumes may be released during a fire. Upon decomposition, this product emits oxides of sulfur, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

## 6. Accidental Release Measures

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Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:	Prevent further leakage or spillage if safe to do so. Wear protective clothing during clean-up. Eliminate all sources of ignition and avoid contact with a spill of this material.
Clean-up methods:	Absorb spill with inert material. Shovel material into appropriate containers according to Federal, State and local governmental regulations.

## 7. Handling and Storage

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Handling:	Prevent contact with eyes, skin and clothing. Do not breathe vapors after handling. Keep container closed. For industrial use only. No
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	PRODUCT. For dilutions, add product slowly to water while stirring to avoid foam from being generated.
<b>Storage:</b>	For safe storage, store between 14 °F (-10°C) and 104 °F (40°C) in a closed and in a cool, well-ventilated place away from incompatible materials.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

## 8. Exposure controls and personal protection

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Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Pyridine, alkyl derivatives	None	None	None	None
1,3-Diethyl-2-thiourea	None	None	None	None
Sulfuric acid	0.2 mg/m <sup>3</sup> TWA Thoracic fraction.	1 mg/m <sup>3</sup> TWA	None	None
Alkylphenol ethoxylate	None	None	None	None

**Engineering controls:** Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.

**Respiratory protection:** If ventilation is not sufficient to effectively prevent buildup of aerosols, mists or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.

**Eye/face protection:** Wear chemical goggles; face shield (if splashing is possible).

**Skin protection:** Chemical resistant, impermeable gloves. Gloves should be tested to determine suitability for prolonged contact. Use of impervious apron and boots are recommended.

## 9. Physical and chemical properties

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Physical state:	Liquid
Color:	Dark brown
Odor:	Pungent
Odor threshold:	Not available.
pH:	< 2
Vapor pressure:	Not determined
Boiling point/range:	> 100 °C (> 212°F)
Melting point/ range:	-23 °C (-9.4 °F)
Specific Gravity:	1.03 - 1.06 at 60 °F (15.56 °C)
Vapor Density:	Not determined
Flash point:	Not applicable
Flammable/Explosive limits - lower:	Not applicable
Flammable/Explosive limits - upper:	Not applicable
Autoignition temperature:	Not applicable
Evaporation rate:	Not determined
Solubility in water:	Complete
Partition coefficient (n-octanol/water):	Not determined
VOC content:	Not applicable
Viscosity:	223 cp

## 10. Stability and reactivity

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Stability:	Stable at normal conditions.
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Upon decomposition, this product emits oxides of sulfur, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Incompatible materials:	Keep away from organic, alkaline, and oxidizing materials, metallic powders, chromates, chlorates, nitrates, and carbides.
Conditions to avoid:	Store away from incompatible materials.

## 11. Toxicological information

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Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Pyridine, alkyl derivatives	No	No	No
1,3-Diethyl-2-thiourea	No	No	No
Sulfuric acid	Known To Be Human Carcinogen.	Group 1	No
Alkylphenol ethoxylate	No	No	No
Hazardous components	Health Effects/Target Organs		
Pyridine, alkyl derivatives	No Target Organs		
1,3-Diethyl-2-thiourea	Irritant, Allergen		
Sulfuric acid	Carcinogen, Corrosive, Irritant, Lung		
Alkylphenol ethoxylate	Irritant		

## 12. Ecological information

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**Ecological information:** Not available.

## 13. Disposal considerations

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**Information provided is for unused product only.**

**Recommended method of disposal:** Dispose of according to Federal, State and local governmental regulations.

**Hazardous waste number:** This product, if discarded directly, would be a characteristic RCRA corrosive waste (D002).

## 14. Transport information

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### U.S. Department of Transportation Ground (49 CFR)

**Proper shipping name:** Sulfuric acid

**Hazard class or division:** 8

**Identification number:** UN 2796

**Packing group:** II

**DOT Reportable quantity:** Sulfuric acid

### International Air Transportation (ICAO/IATA)

**Proper shipping name:** Sulphuric acid

**Hazard class or division:** 8

**Identification number:** UN 2796

**Packing group:** II

### Water Transportation (IMO/IMDG)

**Proper shipping name:** SULPHURIC ACID

**Hazard class or division:** 8  
**Identification number:** UN 2796  
**Packing group:** II

## 15. Regulatory information

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### United States Regulatory Information

**TSCA 8 (b) Inventory Status:** All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

**TSCA 12(b) Export Notification:** None above reporting de minimus

**CERCLA/SARA Section 302 EHS:** Sulfuric acid (CAS# 7664-93-9).

**CERCLA/SARA Section 311/312:** Immediate Health, Delayed Health, Reactive

**CERCLA/SARA 313:** This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Sulfuric acid (CAS# 7664-93-9).

**CERCLA Reportable quantity:** Sulfuric acid (CAS# 7664-93-9) 1,000 lbs. (454 kg)

**California Proposition 65:** This product contains a chemical known in the State of California to cause cancer. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

### Canada Regulatory Information

**CEPA DSL/NDSL Status:** All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

**WHMIS hazard class:** D.1.B, D.2.A, D.2.B, E

## 16. Other information

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**This material safety data sheet contains changes from the previous version in sections:** This Material Safety Data Sheet contains changes from the previous version in Section(s): 1, 2, 3, 7, 8, 9, 11, 13 & 15.

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