Material Safety Data Sheet

Corrosion Inhibitor Pretreatment Filming Agent (RXSOL-81-8154-210)

1. Product and Company Identifaction

Product Name	Corrosion Inhibitor
Product Type	RXSOL-81-8154-210

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

Branch Stock Point : Mumbai, Chennai, Kolkata, Kandla, Visakhapatanam, Fujairah, Muscat, Canada, Kenya

Phone	+91 22 27815540 / 41 / 42
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2. Composition / informationon ingredients

Hazardous Ingredients.	Cyclohexylamine Morpholine	7-13% 3-7%
CAS Number.	Cyclohexylamine Morpholine	108-91-8 110-91-8
Synonym (s).	Not Available	

3. Hazards Identification

Inhalation:	Mist can cause irritation of respiratory tract and inflammation of lungs.
Skin Contact / Absorption:	Causes irritation. May cause burns. Morpholine may be absorbed throughintact skin causing liver, kidney, CNS depression and blood system damage.
Eye Contact:	Causes severe irritation to the mucous membranes of the eyes. May cause ulceration of the eye.
Ingestion:	Burning in mouth and esophagus; nausea, vomiting, abdominal pain and diarrhea, edema (swelling) of larynx and subsequent suffocation. Perforation of gastrointestinal tract can occur. May cause liver, kidney, central nervous system depression and blood system damage.
Exposure Limits:	ACGIH/TLV: 10 ppm (Cyclohexylamine) PEL-TWA: 10 ppm (Cyclohexylamine) TLV-TWA: 10 ppm (Cyclohexylamine) ACGIH/TLV (skin): 20 ppm(Morpholine) TLV-TWA (skin): 20 ppm(Morpholine) PEL-TWA (skin): 20 ppm(Morpholine) PEL-STEL (skin): 20 ppm(Morpholine)

4. First Aid Measures

Inhalation:	Remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek medical attention if difficulties persist.
Skin Contact / Absorption:	Remove contaminated clothing. Wash affected area with soap and water. Seek medical attention if irritation occurs or persists.
Eye Contact:	Flush immediately with water for at least 20 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye tissue. Seek medical attention if symptoms persist.

Ingestion:	Do not induce vomiting. Drink large quantities of water or milk to dilute the chemical. Seek immediate medical attention.
Additional Information.:	Not Available.

5. Fire-fighting Measures

Conditions of Flammability	Flammable liquid
Means of Extinction:	Carbon dioxide and dry chemical extinguishers. Use water spray to disperse vapours.
Flash Point:	48^{o}C
Auto-ignition Temperature:	Not Available
Upper Flammable Limit :	Not Available
Lower Flammable Limit:	Not Available
Hazardous Combustible Products:	Nitrogen oxides
Special Fire Fighting Procedures:	Wear NIOSH-approved self-contained breathing apparatus and protective clothing.
Explosion Hazards:	Vapours are heavier than air and may "travel" to source of ignition causing fire and explosion..

6. Accidental Release Measures

Leak / Spill:
Wear appropriate personal protective equipment if required. Ventilate area. Stop or reduce leak if safe to do so. Prevent material from entering sewers or water ways. Flush with water to remove any residue. Neutralize minor spills with dilute acid before washing away with plenty of water.

Deactivating Materials:
Neutralize with dilute acid..

7. Handling and Storage

Handling Procedures:
Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure.

Storage Requirements:
Store in cool area above freezing point away from incompatible materials.

8. Exposure controls and personal protection

Protective Equipment Eyes:	Chemical goggles, full-face shield, or a full-face respirator is to be worn at all times when product is handled.Contact lenses should not be worn; they may contribute to severe eye injury.
Respiratory	Approved respiratory protection should be used if chance of mist will be formed.
Gloves:	Impervious gloves of chemically resistant material should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.
Clothing:	Body suits, aprons, and/or coveralls of chemical resistant material should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.
Footwear:	Impervious boots of chemically resistant material should be worn. Engineering Controls
Ventilation Requirements:	Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions should be provided. Supply sufficient replacement air to make up for air removed by exhaust systems.
Other:	Keep an eye wash fountain and safety shower available and in close proximity to work area.

9. Physical and chemical properties

Information on basic physical and chemical properties:

Physical State	Liquid
Odor and Appearance	Pale liquid with amine type odour.

Odor Threshold	Not Available
Specific Gravity (Water=1)	>1
Vapor Pressure (mm Hg, 20oC)	Not Available
Vapor Density (Air=1)	Not Available
Evaporation Rate	Not Available
Boiling Point.	Not Available
Freeze/Melting Point.	Not Available
pH	Strong base
Water/Oil Distribution Coefficient.	Not Available
Bulk Density.	Not Available
% Volatiles by Volume	Not Available
Solubility in Water...	Completely soluble
Molecular Formula	Not Available
Molecular Weight.	Not Available

10. Stability and reactivity

Stability:	Stable under normal conditions.
Incompatibility:	Oxidizing materials, acids, copper, copperm alloys,lead
Hazardous Products of Decomposition:	Nitrogen oxides
Polymerization:	Not Available

11. Toxicological information

Severe irritant to the eyes.	Severe irritant to the eyes.
Sensitization:	Not Available
Chronic/Acute Effects:	No other adverse effects expected other than those mentioned above in section 3.
Synergistic Materials:	Not Available
Animal Toxicity Data:	LD50(oral, rat): 156 mg/kg (Cyclohexylamine) LD50(dermal, rat): 320 mg/kg (Cyclohexylamine) LC50(mouse): 493 ppm LD50(oral, rat): 1050 mg/kg (Morpholine) LD50(inhalation, rat): 4000 ppm (Morpholine) LC50(male mouse 4 hour exposire): 1450 ppm (Morpholine) LC50(female mouse 4 hour exposure): 1900 ppm (Morpholine)
Carcinogenicity:	Not Available
Reproductive Toxicity:	Not Available
Teratogenicity:	Not Available
Mutagenicity:	Not Available

12. Ecological information

Fish Toxicity:	Not Available
Biodegradability:	Not Available
Environmental Effects:	Not Available

13. Disposal considerations

Waste Disposal:
Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

14. Transport information

TDG Classification:

Class	8 (3)
Group	II
PIN Number	UN 2920
Other	Secure containers (full and/or empty) with suitable hold down devises during shipment

15. Regulatory information

WHMIS Classification.....……..…….....B, D1, E

NOTE:
THE PRODUCT LISTED ON THIS MSDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS. THIS MSDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.

16. Other information

The information provided about the product on this Safety Data Sheet has been compiled from knowledge of the individual constituents The data given here is based on current knowledge and experience. This Safety Data Sheet describes the product in terms of safety requirements and does not signify any warranty with regard to the product's properties The data given here only applies when product used for proper application(s). The product is not sold as suitable for other applications usage in such may cause risks not mentioned in this sheet. Do not use for other application(s) without seeking advice from manufacturer.

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