Material Safety Data Sheet

Corrosion Inhibitor Intensifier Hytemp O (RXSOL-81-8166-210)

1. Product and Company Identifaction

Product Name	RXSOL-81-8166-210
Product Type	Corrosion Inhibitor Intensifier Hytemp O

Company Details:

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

Stock Point : Fujairah, Mumbai, Kandla, Chennai, Vizag, Kolkata, Canada BC

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

2. Composition / informationon ingredients

Item	Percentage	Cas Number	Mark
Formic Acid	90-95	000064-18-6	Xn
Proprietory	1-10	NA	NA

3. Hazards Identification

INHALATION: Inhalation of solution mist may cause respiratory tract irritation. May cause damage to nasal and respiratory passages. Coughing, chest pains, and breathing difficulty may occur. Gross inhalation may cause pulmonary edema.

INGESTION: HARMFUL OR FATAL IF SWALLOWED. Ingestion may cause severe irritation or burns to the mouth, throat and esophagus. May cause severe damage of gastrointestinal tract.

EYE CONTACT: MAY CAUSE EYE BURNS. Vapors are irritating to eyes. Contact with solution or mist may cause severe irritation or permanent eye damage.

SKIN CONTACT: Causes severe burns.

EXPOSURE LIMITS:

HAZARDOUS COMPONENT	ACGIH TLV	OSHA PEL	LC50 (inhalation)	LD50 (oral)
Formic acid	5 ppm	5 ppm	15 g/m3/15 min rat	1100 mg/kg rat

4. First Aid Measures

INHALATION:
If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Only trained personnel should administer oxygen. Get medical attention.

INGESTION:
Rinse mouth with water several times. DO NOT induce vomiting. Give victim plenty of water. Obtain medical assistance immediately.

EYES:
In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately.

SKIN:
Rush to the nearest hose or shower where the skin should be flushed with large amounts of water for at least 15 minutes while removing contaminated clothing. Get immediate medical attention.

5. Fire-fighting Measures

FLASHPOINT (METHOD): 118-154°F

LOWER EXPLOSION LIMIT (% v/v): 18

UPPER EXPLOSION LIMIT (% v/v): 57

SPECIAL HAZARDS:
May form flammable vapour-air mixture. This product or a component there of can flow along surfaces to reach a distant ignition source and flash back.

EXTINGUISHING MEDIA:
Water fog, carbon dioxide, foam, dry chemical.

SPECIAL FIREFIGHTING PROCEDURES:
Fire-fighters should wear self-contained breathing apparatus and full protective clothing when fighting chemical fires. Cool exposed containers with water spray.

HAZARDOUS COMBUSTION PRODUCTS:
Oxides of carbon.

6. Accidental Release Measures

Wear specified protective equipment. Remove sources of ignition. Small spills - Cover spill with absorbent material. Scoop absorbed material into a suitable container for disposal. Large spills - Dike to contain. Prevent from entering sewers or waterways. Recover product to suitable containers or vessel for reuse, if possible, or for disposal. (Neutralization should be performed only under controlled conditions by specially trained personnel.) Use only explosion proof transfer equipment.

7. Handling and Storage

HANDLING:
Use only in a well ventilated area. Wear specified protective equipment. Use only spark-proof and explosion-proof tools and equipment.

STORAGE REQUIREMENTS:
Keep container tightly closed, in a cool, well ventilated place. Keep away from heat. Keep away from ignition sources. Keep away from incompatible materials.

8. Exposure controls and personal protection

SPECIFIC ENGINEERING CONTROLS:
Use only in a well ventilated area. Local exhaust.

PERSONAL PROTECTIVE EQUIPMENT:
Cartridge respirator. Chemical resistant goggles. Face shield. Butyl rubber gloves. Neoprene gloves. (Resistance to breakthrough > 480 min) Rubber boots. Rubber apron. Coveralls.

9. Physical and chemical properties

PHYSICAL STATE:	Liquid
COLOR:	Colorless/pale yellow
ODOR:	Pungent
ODOR THRESHOLD:	Not available/applicable
SPECIFIC GRAVITY:	1.2 @ 68 F
VAPOR PRESSURE:	4.67 kPa @ 20°C
VAPOR DENSITY (air = 1):	1.6
EVAPORATION RATE:	2 (n-butyl acetate = 1)
BOILING POINT:	101 - 105°C
FREEZING POINT:	-13°C (85% sol.); +8°C (98% sol.)

pH:	2.2 (1% sol.)
SOLUBILITY IN WATER:	Complete

10. Stability and reactivity

STABILITY:
Stable under normal conditions of use.

INCOMPATIBILITY/CONDITIONS OF REACTIVITY:
May react violently with strong acids (nitric, sulphuric), bases or oxidizers. Aluminum. Corrosive to steel.

HAZARDOUS THERMAL DECOMPOSITION PRODUCTS:
Carbon monoxide. Carbon dioxide.

HAZARDOUS POLYMERIZATION:
Will not occur.

11. Toxicological information

CHRONIC EFFECTS: Respiratory ailments. Pulmonary edema. Liver and kidney damage.

SENSITIZATION: Not known.

CARCINOGENICITY: None of the components of this product have been listed as carcinogenic by IARC, NTP or OSHA. (IARCInternational Agency for Research on Cancer) (NTP - National Toxicology Program) (OSHA - Occupational Safety & Health Administration (US))

MUTAGENICITY: Not known.

REPRODUCTIVE TOXICITY: Not known.

12. Ecological information

No specific information available.

13. Disposal considerations

WASTE DISPOSAL: Disposal should be made in accordance with national and local regulations. Consult local waste authorities prior to disposal.

14. Transport information

LAND TRANSPORT (DOT)
Proper Shipping Name: FORMIC ACID
UN/ID No.: UN 1779
Hazard Class - Primary: 8

Hazard Class - Secondary: 3
Packing Group: II
Reportable Quantity (RQ):
Emergency Response Guide #:

AIR TRANSPORT (ICAO/IATA)
Proper Shipping Name: FORMIC ACID
UN/ID No.: UN 1779
Hazard Class - Primary: 8
Hazard Class - Secondary: 3
Packing Group: II

MARINE TRANSPORT (IMDG/IMO)
Proper Shipping Name: FORMIC ACID
UN No.: UN 1779
Hazard Class - Primary: 8
Hazard Class - Secondary: 3
Packing Group: II
EmS: F-E, S-C

15. Regulatory information

SARA TITLE III:

SECTION 302/304 This product does not contain substances listed in Appendix A and B as an Extremely Hazardous Substance.
SECTION 313 This product does not contain ingredients (at a level of 1% or greater) on the List of Toxic Chemicals.

TSCA INVENTORY: The substances in this product are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710).
CALIFORNIA PROP 65: This product does not contain substances which require warning under California Proposition 65.
PRIORITY POLLUTANTS: None

16. Other information

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