# Material Safety Data Sheet

**Corrosion Inhibitor Carbon Dioxide and H2S** (RXSOL-44-2065-025)

## 1. Product and Company Identifaction

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| Part Number | RXSOL-44-2065-025 |
| Product Name | Corrosion Inhibitor for Carbon Dioxide and H2S |

Company Details:

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

Stock Point : Mumbai, Muscat, Fujairah, Nairobi, Kolkata, Vizag, Chennai, Gandhidham, Canada

| | |
|---|---|
| Phone | +91 22 27815540 / 41 / 42 |
| Fax | +91 22 2781 1318 ::: AOH :0091 9821214367 |
| Email | mail@rxmarine.com |


## 2. Composition / informationon ingredients

This product is classified as dangerous in accordance with the Preparations Directive 1999/45/EC.

| Hazardous Substance | CAS Number | SYMBOL | R-PHRASES / NOTAS | % (w/w) |
|---|---|---|---|---|
| Hydrocarbons, C10, aro-matic, 1% naphthalene | 64742-94-5 | - | R38, R41,R52/53 | >75 |
| Imidazoline Salts | Proprietary | Xi | R38, R41,R52/53 | 5 - 10 |
| Quaternary Ammonium compound | Proprietary | C, N | R22, R34, R50 | 1 - 5 |
| Proprietory Blend Non Hazardous Mixture | ..... | .... | ..... | 81-90 |

Refer to Section 16 for descriptions of relevant risk phrases and Notas.

## 3. Hazards Identification

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| HAZARD CLASSIFICATION : | Toxic by inhalation, in contact with skin and if swallowed. Irritating to eyes and skin |
| HUMAN HEALTH HAZARDS - ACUTE : | |
| INHALATION : | Toxic by inhalation. Repeated or prolonged exposure may irritate the respiratory tract. |
| SKIN CONTACT : | Contact with skin can cause moderate irritation |
| EYE CONTACT | Irritating, and will injure eye tissue if not removed promptly |
| INGESTION : | Not a likely route of exposure. Toxic if swallowed |

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| PHYSICAL AND CHEMICAL HAZARDS | Combustible |

## 4. First Aid Measures

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| INHALATION : | Remove to fresh air, treat symptomatically. If symptoms develop, seek medical advice |
| SKIN CONTACT | Immediately flush with plenty of water for at least 15 minutes. If symptoms develop, seek medical advice. |
| EYE CONTACT | Immediately flush eye with water for at least 15 minutes while holding eyelids open. If symptoms develop, seek medical advice. |
| INGESTION | Do not induce vomiting without medical advice. If conscious, washout mouth and give water to drink. If reflexive vomiting occurs, rinse mouth and repeat administration of water. |
| NOTE TO PHYSICIAN | Based on the individual reactions of the patient, the physician's judgement should be used to control symptoms and clinical condition |

## 5. Fire-fighting Measures

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| FLASH POINT : | Not applicable |
| EXTINGUISHING MEDIA | Not expected to burn. Use extinguishing media appropriate for surrounding fire. |
| FIRE AND EXPLOSION HAZARD | Not flammable or combustible. |
| SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTING | In case of fire, wear a full face positive-pressure self contained breathing apparatus and protective suit |

## 6. Accidental Release Measures

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| PERSONAL PRECAUTIONS | Restrict access to area as appropriate until clean-up operations are complete. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection). Stop or reduce any leaks if it is safe to do so. Ventilate spill area if possible. Ensure clean-up is conducted by trained personnel only. Do not touch spilled material. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Notify appropriate government, occupational health and safety and environmental authorities. |
| METHODS FOR CLEANING UP | SMALL SPILLS: Soak up spill with absorbent material. Place residues in a suitable, covered, properly labeled container. Wash affected area. LARGE SPILLS: Contain liquid using absorbent material, by digging trenches or by diking. Reclaim into recovery or salvage drums or tank truck for proper disposal. |
| ENVIRONMENTAL PRECAUTIONS | Do not contaminate surface water |

## 7. Handling and Storage

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| HANDLING | Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. Do not breathe vapors/gases/dust. Keep the containers closed when not in use. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Ensure all containers are labeled |

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| STORAGE CONDITIONS | Store in suitable labeled containers. Store the containers tightly closed. Amine and sulphite products should not be stored within close proximity or resulting vapors may form visible airborne particles. Avoid direct sunlight. At temperatures greater than 50'C may decompose exothermically with release of sulphur dioxide. 12 month shelf life under given storage conditions |
| SUITABLE CONSTRUCTION MATERIAL | Teflon, Perfluoroelastomer, PTFE, TFE, FEP (encapsulated), HDPE (high density polyethylene), Viton, Neoprene, Polypropylene, Stainless Steel 304, Stainless Steel 316L, Nitrile, EPDM |
| UNSUITABLE CONSTRUCTION MATERIAL | Brass, Aluminum, Mild steel, Carbon Steel C1018 |
| SPECIFIC USE(S) | |
| OXYGEN SCAVENGER | For specific dosages and customized applications please contact your representative |

## 8. Exposure controls and personal protection

MONITORING MEASURES

A small volume of air is drawn through an absorbant or barrier to trap the substance(s) which can then be desorbed or removed and analyzed as referenced below

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| ENGINEERING MEASURES | The use of local exhaust ventilation is recommended to control emissions near the source. Laboratory samples should be handled in a fumehood. Provide mechanical ventilation of confined spaces |
| PERSONAL PROTECTION | |
| GENERAL ADVICE | The use and choice of personal protection equipment is related to the hazard of the product, the workplace and the way the product is handled. In general, we recommend as a minimum precaution that safety glasses with side-shields and workclothes protecting arms, legs and body be used. In addition any person visiting an area where this product is handled should at least wear safety glasses with side-shields. The applicable European standard can be found in EN 166 . |
| RESPIRATORY PROTECTION | Where concentrations in air may exceed the limits given in this section, the use of a half face filter mask or air supplied breathing apparatus is recommended. A suitable filter material depends on the amount and type of chemicals being handled. Consider the use of filter type: E The applicable European standard can be found in EN 140, EN 137, EN 143 and EN 14387. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection |
| HAND PROTECTION | When handling this product, the use of chemical gauntlets is recommended. The choice of work glove depends on work conditions and what chemicals are handled, but we have positive experience under light handling conditions using gloves made from PVC Gloves should be replaced immediately if signs of degradation are observed. Breakthrough time not determined as preparation, consult PPE manufacturers. The applicable European standard can be found in EN 374 |
| SKIN PROTECTION | When handling this product, the use of overalls, a chemical resistant apron and rubber boots is recommended. The applicable European standard can be found in EN ISO 20345 |
| EYE PROTECTION | Wear chemical splash goggles. The applicable European standard can be found in EN 166 |

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| HYGIENE RECOMMENDATIONS | Use good work and personal hygiene practices to avoid exposure. Keep an eye wash fountain available. Keep a safety shower available. If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse. Always wash thoroughly after handling chemicals. When handling this product never eat, drink or smoke |

## 9. Physical and chemical properties

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| PHYSICAL STATE | Liquid |
| APPEARANCE | Yellow Clear |
| ODOR | Pungent |
| FLASH POINT | Not applicable |
| SPECIFIC GRAVITY | 1.035 (16 °C) |
| SOLUBILITY IN WATER | Insoluble |
| pH | N/A |
| VISCOSITY | Calculated 10cst |
| MELTING POINT | -20 °C |
| INITIAL BOILING POINT | 100 °C Calculated |
| VAPOR PRESSURE | 3.2 kPa (25 °C) |
| EVAPORATION RATE | 1.5 (BuAc = 1) |

Note: These physical properties are typical values for this product and are subject to change

## 10. Stability and reactivity

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| STABILITY | This material is unstable at elevated temperatures, which may cause exothermal decomposition |
| HAZARDOUS POLYMERIZATION | Hazardous polymerization will not occur |
| CONDITIONS TO AVOID | At temperatures greater than 50°C may decompose exothermically with release of Sulphur dioxide gas |
| MATERIALS TO AVOID | SO2 may react with vapors from neutralizing amines and may produce a visible cloud of amine salt particles., Contact with strong acids (e.g. sulfuric, phosphoric, nitric, hydrochloric, chromic, sulfonic) may generate heat, splattering or boiling and toxic vapors |
| HAZARDOUS DECOMPOSITION PRODUCTS | |
| Under fire conditions | Amine |

## 11. Toxicological information

No toxicity studies have been conducted on this product

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| SENSITIZATION | Sulfites can cause an allergic reaction in sensitive individuals |
| CARCINOGENICITY | None of the substances in this product are listed as carcinogens by the International Agency for Research onCancer (IARC), the National Toxicology Program (NTP) or the American Conference of Governmental Industrial Hygienists (ACGIH). |

For additional information on the hazard of the preparation, please consult section 2 and 12.

## 12. Ecological information

ECOTOXICOLOGICAL EFFECTS

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| MOBILITY | The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM , provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models. If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages (Air-5%, Water- 30 - 50%, Soil/Sediment- 50 - 70%) The portion in water is expected to be soluble or dispersible |
| PERSISTENCY AND DEGRADATION | The organic portion of this preparation is expected to be readily biodegradable |
| BIOACCUMULATION POTENTIAL | This preparation or material is not expected to bioaccumulate |

## 13. Disposal considerations

If this preparation becomes a waste, the final user must define and assign the appropriate European Waste Catalogue code. Use only authorized contractors. Ensure compliance with EC, national and local regulations.

Dispose of wastes in an approved incinerator or waste treatment/disposal site, in accordance with all applicable regulations. Do not dispose of wastes in local sewer or with normal garbage. This product is ashless and can be burned directly in appropriate equipment. This product is NOT suitable for disposal via municipal sewers, drains, natural streams or rivers.

Empty drums should be taken for recycling, recovery, or disposal through a suitably qualified or licensed contractor.

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| EUROPE WASTE CODE | 16 03 03* - OFF SPECIFICATION BATCHES AND UNUSED PRODUCTS - Inorganic wastes containing dangerous substances. If this product is used in any further processes, the final user must redefine and assign the most appropriate European Waste Catalogue Code |
| NATIONAL REGULATIONS FRANCE | |
| Waste Code | Relevant |

## 14. Transport information

The information in this section is for reference only and should not take the place of a shipping paper (bill of lading) specific to an order. Please note that the proper Shipping Name / Hazard Class may vary by packaging, properties, and mode of transportation. Typical Proper Shipping Names for this product are as follows.

LAND TRANSPORT

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| Proper Shipping Name | PRODUCT IS NOT REGULATED DURING TRANSPORTATION. |

AIR TRANSPORT (ICAO/IATA)

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|---|---|
| Proper Shipping Name | PRODUCT IS NOT REGULATED DURING TRANSPORTATION |

MARINE TRANSPORT (IMDG/IMO)

| | |
|---|---|
| Proper Shipping Name | PRODUCT IS NOT REGULATED DURING TRANSPORTATION |

## 15. Regulatory information

CLASSIFICATION AND LABELLING

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|---|---|
| GOVERNING DIRECTIVE(S): | Dangerous Substances Directive 67/548/EEC and Dangerous Preparations Directive 1999/45/EC. |
| HAZARD SYMBOLS | IRRITANT |
| | Contains:.Amine |

RISK PHRASES

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| R31 | Contact with acids liberates gas. |
| R36/37/38 - | Irritating to eyes, respiratory system and skin |

SAFETY PHRASES

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| S23 - | Do not breathe vapor |
| S24/25 - | Avoid contact with skin and eyes. |
| S26 - | In case of contact with eyes, rinse immediately with plenty of water and seek medical advice |
| S28 | After contact with skin, wash immediately with plenty of water |
| S37/39 - | Wear suitable gloves and eye/face protection. |

NATIONAL REGULATIONS FRANCE

Table of occupational diseases, Article L461-4. Social Security Code- Decree 11/2/2003: Not-applicable.

Dangerous or Poisonous Substances and Preparations: Relevant.

Special medical supervision - Decree of 11 July 1977: Not-applicable.

Work Restrictions:

Fair labor standards act, Article R234-9 and 10 (women): Not-applicable.

Fair labor standards act, Article R234-16, 20 and 21 (young workers): Relevant.

Fair labor standards act, Decree of the 8/10/90 (temporary work and contract last given): Not-applicable.

## 16. Other information

LIST OF RELEVANT R-PHRASES AND NOTAS IN SECTION 3

R23 - Toxic by inhalation.

R36/37/38 - Irritating to eyes, respiratory system and skin.

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to insure safe workplace operations.

DISCLAIMER OF LIABILITY :The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.