Material Safety Data Sheet

Ferric Chloride 40% (RXSOL-19-1627-035)

1. Product and Company Identifaction

Product Name	RXSOL-19-1627-035
Product Type	Ferric Chloride Solution

Company Details:

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

Stock Point : Mumbai, Gandhidham, Chennai, Visakhapatnam, Kolkata, Fujairah, Muscat Oman

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2. Composition / informationon ingredients

Chemical Name	Concentration	CAS Number	EC Number	R Phrases*	Symbols
Ferric chloride hexahydrate	40-60	10025-77-1			
Water	60-40	10025-77-1			

*See Section 16

3. Hazards Identification

Potential Acute Health Effects:
Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, . Hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive). Slightly hazardous in case of inhalation (lung sensitizer). Non-corrosive for lungs. Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract,characterized by coughing, choking, or shortness of breath. Severe over-exposure can result in death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or,occasionally, blistering.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Ferric chloride hexahydrate]. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to kidneys, liver, spleen, cardiovascular system, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

4. First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15minutes. Cold water may be used. Get medical attention immediately.

Skin Contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used.Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Ingestion:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to anunconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Serious Ingestion: Not available.

5. Fire-fighting Measures

Flammability of the Product: Non-flammable.
Auto-Ignition Temperature: Not applicable.
Flash Points: Not applicable.
Flammable Limits: Not applicable.
Products of Combustion: Not available.
Fire Hazards in Presence of Various Substances: Not applicable.
Explosion Hazards in Presence of Various Substances: Non-explosive in presence of open flames and sparks, of shocks.
Fire Fighting Media and Instructions: Not applicable.
Special Remarks on Fire Hazards: Not available.
Special Remarks on Explosion Hazards: Not available.

6. Accidental Release Measures

Small Spill:

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spill:

Corrosive liquid. Poisonous liquid. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material.Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

7. Handling and Storage

Precautions:
Keep locked up.. Keep container dry. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product.In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 24°C (75.2°F).

8. Exposure controls and personal protection

Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Personal Protection:

Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots. Personal Protection in Case of a Large Spill:Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
Ferric chloride T: 1 (mg/m3) from ACGIH (TLV) [United States] TWA: 1 (mg/m3) from NIOSH Consult local authorities for acceptable exposure limits.



Gloves



Goggles



Suit

9. Physical and chemical properties

Odour	Not Available
Appearance	Liquid, soluble in water
pH	Acidic
Boiling point	100 °C at 760 mm /Hg
Vapour pressure	Not known
Vapour density	Not known
Freezing point	0 °C at 760 mm/Hg
Completely soluble in water	
Specific gravity (water=1)	1.39

10. Stability and reactivity

- This article is considered stable under normal conditions
- Avoid overheating

11. Toxicological information

Toxicological information	No experimental data available.
Inhalation	In cases of severe exposure, irritation may develop.
Contact with skin	Prolonged skin contact will result in defatting of the skin, leading to irritation, and in some cases, dermatitis.
Contact with eyes	May cause severe irritation Can cause damage to the eyes.
Ingestion	No effects for small dosage. Large dose effects not known May cause gastro-intestinal disturbances.

Carcinogenicity	No evidence of carcinogenic effects.

12. Ecological information

Ecotoxicity	This product does not contain ingredients which are classified in the EU as dangerous for the environment. The product was found to meet the requirements of paragraph 1.8.2 of the P&A Standards and is included in MEPC.2/Circ.8
Mobility	Completely soluble in water
Persistence and Biodegradability	The components in this product are readily biodegradable.
Bioaccumulation Potential	Bioaccumulation of the components in this product is insignificant.
Other Adverse Effects	No environmental problems are expected when the product is used / handled correctly.

13. Disposal considerations

Classification	EU Waste class: 07.06
Disposal considerations	Do not discharge into drains or the environment, dispose to an authorised waste collection point.Disposal should be in accordance with local, state or national legislation

14. Transport information

- Not classified as hazardous for transport

15. Regulatory information

Risk Phrases	Risk of serious damage to eyes
Safety Phrases	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice (S26).Wear suitable gloves and eye/face protection (S37/39

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 productis 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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