Material Safety Data Sheet

Zinc Chloride (RXSOL-60-6141-025)

1. Product and Company Identifaction

Product Name	Zinc Chloride
Part Number	RXSOL-60-6141-025

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

Stock Point : Mumbai, Kandla, Chennai, Kolkata, Visakhapatnam, Fujairah

Phone	+91 22 27815540 / 27815541 / 27815542
Fax	+91 22 2781 1318 :::AOH :0091 9821214367
Email	123@rxmarine.com
Website	www.rxmarine.com

2. Composition / informationon ingredients

Name of Substance	Cas Number	EC Num
Zinc chloride	7646-85-7	231-592

3. Hazards Identification

Signal Word	Danger
Hazard Statements	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H410 Very toxic to aquatic life with long lasting effects.
Precautionary statements - prevention	P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection
Precautionary statements - response	P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308 + P310 IF exposed or concerned: immediately call a POISON CENTER or doctor/ physician.

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 15 minutes. Cold water may be used. Get medical attention.
Skin Contact	In case of contact, immediately flushes 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.
Inhalation:	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.

Ingestion:	Do not induce vomiting. Obtain medical attention.If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain an open airway and prevent aspiration.
Notes to Physician	Treat symptomatically

5. Fire-fighting Measures

Flammability of the Product	Non-flammable.
Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Hazardous combustion products	When heated to decomposition, it emits toxic fumes of Hydrochloric Acid, and Zinc Oxide.
Protective Equipment	Use personal protective equipment.
Special protective equipment for firefighters	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.
Further information	Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. Accidental Release Measures

Spillage	Corrosive solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. 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.
Personal Protection	Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.
Enviromental Precaution	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Methods and materials for containment and cleaning	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal. Cover drains.

7. Handling and Storage

Handling	Keep locked up.. Keep container dry. Do not ingest. Do not breathe dust. 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. Keep away from incompatibles such as oxidizing agents, metals.
Storage	Deliquescent. Keep container tightly closed. Keep container in a cool, well-ventilated area.
General occupational hygiene	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

8. Exposure controls and personal protection

Engineering Control	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection	Eye/face Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Splash goggles. Full suit. Vapor and dust respirator. Boots. 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.
Other Protection Measure	Handle in accordance with good industrial hygiene and safety practice.
Exposure Limit	TWA: 1 STEL: 2 (mg/m3) [United Kingdom (UK)] TWA: 1 STEL: 2 (mg/m3) from ACGIH (TLV) [United States] TWA: 1 STEL: 2 (mg/m3) from OSHA (PEL) [United States]Consult local authorities for acceptable exposure limits.



Gloves



Suit

9. Physical and chemical properties

Form	Powder
Colour	White
Odour	Odourless
Odor Threshold	Not Applicable
pH	ca. 5 at 100 g/l 20 °C
Melting Point/Range	287 - 304 °C at ca.1,013 hPa Method: OECD Test Guideline 102
Boiling Point/Boiling Range	732 °C at 1,013 hPa
Flash Point	Not Applicable
Evaporation Rate	Not Applicable
Flammability (solid, gas)	The product is not flammable.
Explosive limits	No Data Available
Vapour pressure	1.33 hPa at 428 °C
Vapour Density	No information available
Density	2.93 g/cm3 at 22 °C Method: OECD Test Guideline 109
Partition coefficient	No data available

Explosive properties	None
Solubility in water	851 g/l at 25 °C Method: OECD Test Guideline 105
Ignition temperature	No information available.
Decomposition temperature	ca.360 °C
Viscosity, dynamic	No information available.
Oxidizing properties	None
Bulk density	ca.1,400 - 1,800 kg/m3

10. Stability and reactivity

Reactivity	No Data Available
Stability	The product is chemically stable under standard ambient conditions (room temperature).
Possibility of hazardous reactions	Violent reactions possible with: sodium, Strong oxidizing agents
Conditions to avoid	Exposure to moisture
Incompatible materials	Strong oxidizing agents
Hazardous Polymerization	Hazardous polymerization does not occur.

11. Toxicological information

Rout Of Entry	Absorbed through skin. Dermal contact. Inhalation. Ingestion.
Toxicity to Animal	Acute oral toxicity (LD50): 329 mg/kg [Mouse].
Toxic Effects on Human	May cause damage to the following organs: upper respiratory tract. Other Very hazardous in case of skin contact (irritant), of ingestion, of inhalation. Hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive).
Special Remarks on other Toxi Effects on Humans:	Acute Potential Health Effects: Skin: Causes skin irritation with possible burns, especially if skin is wet or moist. May be absorbed by the skin. Eyes: May cause severe irritation with posssible eye burns and irreversible eye injury. May cause corneal ulceration, and opacification, and glaucoma and severe iritis. Eye or skin contact may result in mild, moderate, or severe irritation and burns depending on the concentration and duration of exposure. Inhalation: May cause severe respiratory tract irritation, and may affect behavior. Ingestion: Harmful if swallowed. May cause severe digestive tract irritation withnausea, vomiting, diarrhea abdominal pain, possible burns

12. Ecological information

Eco Toxicity	Not Available
COD and BOD 5	Not Available
Products Biodegradation:	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.
Mobility in soil	No Information available
Results of PBT and vPvB assessment	PBT/vPvB: Not applicable for inorganic substances
Other adverse effects	Additional ecological information. Hazard for drinking water supplies. Discharge into the environment must be avoided.

13. Disposal considerations

Waste treatment Method	Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

14. Transport information

Land transport (ADR/RID)

UN Number	UN 2330
Proper shipping name	ZINC CHLORIDE,ANHYDROUS
Hazard Class	8
Packing group	III
Special precautions for user	No Data Available
Tunnel restriction code	E

TDG

UN Number	UN 2330
Proper shipping name	ZINC CHLORIDE,ANHYDROUS
Hazard Class	8
Packing group	III
Special precautions for user	No Data Available
Tunnel restriction code	E

IATA

UN Number	UN 2330
Proper shipping name	ZINC CHLORIDE,ANHYDROUS
Hazard Class	8
Packing group	III
Special precautions for user	No Data Available
Environmentally hazardous	Yes

IMDG/IMO

UN Number	UN 2330
Proper shipping name	ZINC CHLORIDE,ANHYDROUS
Hazard Class	8
Packing group	III
Special precautions for user	No Data Available
EmS	F-A S-B

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code — Not relevant

15. Regulatory information

Fedral and State Regulation	Connecticut hazardous material survey.: Zinc chloride Illinois toxic substances disclosure to employee act: Zinc chloride Illinois chemical safety act: Zinc chloride New York release reporting list: Zinc chloride Rhode Island RTK hazardous substances: Zinc chloride Pennsylvania RTK: Zinc chloride Minnesota: Zinc chloride Massachusetts RTK: Zinc chloride Massachusetts .
Other Regulation	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.
WHMIS (Canada)	CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). CLASS D-2A: Material causing other toxic effects. CLASS E: Corrosive solid.
DSCL (EEC)	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects

HMIS

Health Hazard	: 3
Fire Hazard	: 0
Reactivity	: 0
Personal Protection	: j

Fire :

Health Hazard	: 2
Fire Hazard	: 1
Reactivity	: 3
Specific Hazard	:

16. Other information

Other Information	The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and weassume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if **Rx Marine International** has been advised of the possibility of such damages.