

1. Product and Company Identification

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Product Name RXSOL-31-3028-020
Product Type Chlorine Powder

Company Details:

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

Stock Point : Mumbai, Kandla, Chennai, Visakhapatnam, Kolkata, Fujairah, Oman, Kenya, Canada

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2. Composition / Information on ingredients

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Hazardous Ingredients	% by Weight	Cas No.
Calcium Hypochlorite	60-80%	7778-54-3
Sodium Chloride	10-20%	7647-14-5
Calcium Chloride	0-5%	10043-52-4
Calcium Hydroxide	0-4%	1305-62-0
Calcium Carbonate	0-5%	471-34-1
Calcium Chlorate	0-5%	10137-74-3
Water	5.5-10%	7732-18-5

3. Hazards Identification

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Inhalation	Dust and mist irritate the nose and throat. In confined areas, mechanical agitation can result in high levels of dust, and reaction with incompatibles materials (e.g., acids and water/moisture) can result in high concentrations of chlorine vapour, either of which may result in burns to the respiratory tract, producing lung edema, shortness of breath, wheezing, choking, chest pains, impairment of lung function, and possible permanent lung damage. Calcium hypochlorite dust and solutions can cause irritation and in severe cases, chemical burns, which are characterized by redness, swelling, and scab formation. Moisture from perspirations will accelerate tissue destruction.
Skin Contact / Absorption	
Eye Contact	Exposure to calcium hypochlorite can cause eye irritation and vision impairment. Contact can produce impairment of vision and corneal damage.
Ingestion	When ingested, there will be burning of the mouth and throat. Can cause abdominal cramps, vomiting, diarrhea, nausea, and/or tissue ulceration which may lead to convulsions, coma, and even death.
Exposure Limits	Ceiling= 3mg/m ³ as chlorine (manufacturer's internal standard)

4. First Aid Measures

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Inhalation	Remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek immediate medical attention.
Skin Contact / Absorption	Remove contaminated clothing. Wash affected area with soap and water.

Eye Contact	Seek medical attention if irritation occurs or persists.
Ingestion	Flush immediately with water for at least 20 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye tissue. Seek immediate medical attention.
Additional Information	Immediately give large amounts of water. Do not induce vomiting. If vomiting occurs, lean victim forward to prevent breathing in vomitus. Do not give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention.

5. Fire-fighting Measures

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Conditions of Flammability	Non-flammable. Note calcium hypochlorite is a strong oxidizing agent; may form explosive mixtures with combustibles, organic, or other oxidizable materials.
Means of Extinction	Drench with water, and cool surrounding products and area with water. Avoid dry extinguishers containing ammonium compounds.
Flash Point	Not Applicable
Auto-ignition Temperature	Not Applicable
Upper Flammable Limit	Not Applicable
Lower Flammable Limit	Not Applicable
Hazardous Combustible Products	Chlorine, oxygen, and chlorine monoxide at higher temperatures. Water in contact with hot calcium hypochlorite can release hydrochloric acid or chlorine gas.
Special Fire Fighting Procedures	Wear NIOSH-approved self-contained breathing apparatus and protective clothing.
Explosion Hazards	Not sensitive to mechanical impact or static discharge.

6. Accidental Release Measures

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Leak / Spill.	Wear appropriate personal protective equipment. Ventilate area. Stop or reduce leak if safe to do so. Prevent material from entering sewers. Flush with water to remove any residue. .
Deactivating Materials	Not available

7. Handling and Storage

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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 a cool, dry, well-ventilated place. Keep container tightly closed, and away from incompatible materials. Keep out of the sun. .

8. Exposure controls and personal protection

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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

Use NIOSH-approved respirator - full facepiece with chlorine and dust/mist cartridges when dust is present. Use a self-contained breathing apparatus should be used for major spills

Gloves

Impervious gloves of chemically resistant material (rubber or PVC) 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 at all times

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

Emergency shower and eyewash should be in close proximity

9. Physical and chemical properties

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Physical State

Solid

Odor and Appearance

White, strong chlorine odour

Odor Threshold

~ 1.4 mg/m³ based on chlorine

Specific Gravity (Water=1)

Specific Gravity (Water=1)

Vapor Pressure (mm Hg, 20C)

not applicable

Vapor Density (Air=1)

Not available.

Evaporation Rate

Not available.

Boiling Point

not applicable

Freeze/Melting Point

Decomposes at 170-180°C

pH

10.4-10.8 (1% solution)

Water/Oil Distribution Coefficient

Not applicable

Bulk Density

0.8 g/cm³

% Volatiles by Volume

Not available

Solubility in Water

18% at 25°C

Molecular Formula

Ca(OCl)₂

Molecular Weight

142.98

10. Stability and reactivity

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Stability

Stable in optimum storage conditions. Heat, sunlight and contamination could cause decomposition

Incompatibility

Acids, reducing agents, combustible materials such as wood, cloth, or organic materials, dry powder fire extinguishers containing monoammonium phosphate, metals such as iron and copper and their alloys, water or steam, ammonia, urea, amines

Hazardous Products of Decomposition

Water in contact with calcium hypochlorite releases chlorine gas. Contact with incompatibles presents an explosion and fire hazard. Toxic or

Polymerization

corrosive fumes may be liberated. These include chlorine gas
Will not occur

11. Toxicological information

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Irritancy

Causes irritation and burns to eyes and skin

Sensitization

Not available

Chronic/Acute Effects

Skin irritation may occur from repeated or prolonged skin contact.
Chronic inhalation exposure may cause impairment of lung function and
permanent lung damage. Asthma, respiratory and cardiovascular disease
may be aggravated by exposure to this chemical

Synergistic Materials

Not available

Animal Toxicity Data

LC50(inhalation, rat, 1 hour)= 1300mg/m3 based on chlorine

LD50(oral, rat)= 850mg/kg

LD50(dermal, rabbit)= > 2000mg/kg

Carcinogenicity

Not considered to be carcinogenic as per IARC, NTP, OSHA, and
ACGIH.

Reproductive Toxicity

Not reported to show reproductive toxicity.

Teratogenicity

Results in laboratory analysis show it is not a teratogen

Mutagenicity

Results in laboratory analysis show it is not a mutagen

12. Ecological information

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Fish Toxicity

LC50(bluegill, 96 hour)= 0.088mg/L

LC50(rainbow trout, 96 hour)= 0.16mg/L

LC50(daphnia magna, 48 hour)= 0.11mg/L

Biodegradability

Not available

Environmental Effects

Not available

13. Disposal considerations

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Waste Disposal

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

14. Transport information

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DOT Classification

CLASS 5.1: Oxidizing material.

Identification

Calcium hypochlorite, dry : UN1748 PG: II

Special Provisions for Transport

Not available.

15. Regulatory information

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Federal and State Regulations

Pennsylvania RTK: Calcium hypochlorite
Massachusetts RTK: Calcium hypochlorite
TSCA 8(b) inventory: Calcium
hypochlorite CERCLA: Hazardous substances.:
Calcium hypochlorite
OSHA: Hazardous by definition of Hazard
Communication Standard (29 CFR 1910.1200).

Other Regulations**Other Classifications**

WHMIS (Canada)

CLASS C: Oxidizing material. CLASS E:
Corrosive solid.

DSCL (EEC)

R22- Harmful if swallowed. R38- Irritating to
skin. R41- Risk of serious damage to eyes.

HMIS (U.S.A.)

Health Hazard: 3

Fire Hazard: 0

Reactivity: 2

Personal Protection: j

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 0

Reactivity: 1

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Vapor and dust respirator. Be
sure to use an approved/certified respirator or
equivalent. Wear appropriate
respirator when ventilation is inadequate. Splash
goggles.

16. Other information

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The information contained in this safety data sheet is given in good faith. It is accurate to the best of our knowledge and belief and represents the most up to date information. The information given in this data sheet does not constitute or replace the users own assessment of workplace risk as required by other health and safety legislation.

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