

MATERIAL SAFETY DATA SHEET

Product: **Zinc Chloride**

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: Zinc Chloride, Granular, Technical
Product Code: CH-7646857A
Chemical Formula: ZnCl₂
General or Generic ID: Not available.

Company

ArtChemicals.com
2250 Davis Street
San Leandro, CA 94577-2204
510-639-4670

Emergency Telephone Number:

1-800-451-8346

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS No.</u>	<u>Chemical Identity</u>	<u>Common Name</u>	<u>%</u>
7646-85-7	N/A	Zinc Chloride	100

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye:

Very hazardous in case of eye contact (irritant/corrosive). Symptoms include stinging, tearing, redness and impairment of vision. The degree of injury will depend on the amount of material that gets into the eye and the speed and thoroughness of the first aid treatment.

Skin:

Very hazardous in case of skin contact (irritant/permeator/corrosive). Symptoms may include redness, burning of skin, or, occasionally, blistering. The degree of injury will depend on the amount of material that gets on the skin and the speed and thoroughness of the first aid treatment.

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Ingestion:

Very hazardous in case of ingestion (irritant). Inhalation of dust will produce irritation to gastrointestinal tract.

Inhalation:

Very hazardous in case of inhalation (irritant). Breathing in large amounts may cause respiratory irritation, burning, sneezing and coughing.

Symptoms of Exposure:

Not available.

Development Information:

Not available.

The substance may be toxic to kidneys, pancreas.

Repeated or prolonged exposure to the substance can produce target organs damage.

Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage.

Cancer Information:

Not available.

Primary Route(s) of Entry:

Inhalation, skin absorption, skin contact, and eye contact.

4. FIRST AID MEASURES

Inhalation:

If inhaled, promptly remove individual to fresh air. If not breathing, give oxygen. Get medical attention.

Ingestion:

Do NOT induce vomiting, unless directed by medical personnel. Seek medical attention. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Do not leave individual unattended. Loosen tight clothing such as collar, tie, belt or waistband. Get medical attention.

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Eyes:

Remove contact lenses if worn. Spread eyelids with fingers and flush eye for minimum of 15 minutes with water; keep rotating the eyes to ensure complete flushing. Cold water may be used. Do not use an eye ointment. Seek medical attention immediately.

Skin:

After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover the irritated skin with an emollient. Seek medical attention. Wash contaminated clothing before reusing.

Note to Physicians:

Not available.

5. FIRE FIGHTING MEASURES

Flash Point: Non flammable. Not applicable.

Explosive Limit: Not available.

Auto-ignition Temperature: Not applicable.

Hazardous Products of Combustion: When heated to decomposition, it emits toxic fumes of Hydrochloric Acid, and Zinc Oxide.

Extinguishing Media: SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

SPECIAL FIRE-FIGHTING PROCEDURES: Not applicable.

NFPA CODES: Health = 3 Flammability = 0 Reactivity = 0

6. PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled:

Small Spill:

Use appropriate tools and disposes of according to local and regional authority requirements.

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Large Spill:

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.

7. PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Deliquescent. Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 25°C (77°F). 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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Be sure to use an approved/certified respirator or equivalent.

Skin Protection:

Wear resistant gloves. To prevent repeated or prolonged skin contact, wear impervious clothing and boots or lab coat.

Eye Protection:

Chemical splash goggles in compliance with OSHA regulations are advised. Face shield. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Other Protective Clothing or Equipment:

Provide sufficient mechanical ventilation to maintain exposure below level of overexposure. Boots. Full suit. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling product.

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Exposure Limits:

Not available.

Consult local authorities for acceptable exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: White solid. (Odorless).

Molecular Weight: 136.29 g/mole

pH (1% soln/water): Not available.

Boiling Point: 732 °C (1349.6 °F).

Melting Point: 290 °C (1349.6 °F).

Specific Gravity: 2.907 (Water=1).

Vapor Pressure (@ 20 °C): Not available.

Evaporation Rate: Not available.

Solubility in Water: Easily soluble in cold water.

10. STABILITY AND REACTIVITY

Incompatibility: Moisture, metals, and oxidizing agents.

Stability: Stable.

Hazardous Decomposition: N/A

Hazardous Polymerization: Will not occur.

SPECIAL REMARKS ON REACTIVITY: Very deliquescent. Incompatible with cyanides, sulfides

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity (LD50): 329 mg/kg [Mouse].

Acute Potential Health Effects:

Skin: Causes skin irritation with possible burns, especially if skin is wet or moist. May be absorbed by the skin.

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Eyes: May cause severe irritation with possible 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. Symptoms may include sore throat, coughing, shortness of breath, dyspnea, chest tightness, headache, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), delayed lung edema, bronchial asthma. Inhalation of fumes may cause metal fume fever. It is characterized by flu-like symptoms (fever, chills, cough, muscle pain, weakness), chest pain.

Ingestion: Harmful if swallowed. May cause severe digestive tract irritation with nausea, vomiting, diarrhea abdominal pain, possible burns (corrosion and permanent tissue destruction) of the esophagus and digestive tract and perforation of the stomach and possible death. It may also affect behavior/Central nervous system (central nervous system depression), the urinary system (kidney damage - hematuria, oliguria, renal failure), cardiovascular system, respiration (dyspnea), metabolism, pancreas (elevated amylase, and glucose levels), liver enzymes, and blood (changes in white and red blood cell count, changes in serum composition). Zinc chloride is irritating or caustic depending on the concentration ingested.

Chronic Potential Health Effects:

Skin: Causes skin irritation with possible burns, especially if skin is wet or moist.

12. ECOLOGICAL INFORMATION

Not available.

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. The product itself and its products of degradation are as toxic.

13. DISPOSAL CONSIDERATION

Waste Disposal Method:

Dispose of in accordance with all applicable local, state and federal regulations.

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14. DOT SHIPPING NAME & IDENTIFICATION:

Zinc Chloride. Class 8: Corrosive material. UNNA: 2331. PG: III

15. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that information is current, applicable, and suitable to their circumstances.