

SAFETY DATA SHEET

1. Identification of the Substance and of the Company

Revised: May 23, 2025

Product Name: Zinc Chloride USP**WC Code:** 26-002

Product Use: Galvanizing fluxes, soldering fluxes, electroplating, batteries as electrolyte, preservation of glue and timber, production of ethyl acetate, active carbon, dehydrating and condensing agent, burnishing and polishing compounds, as a mordant in dyeing textiles, glass etching, oil refining, parchment, embalming and taxidermists fluid, off-set printing, antistatic, stabilizing agent for diazonium compounds.

Company**WINTERSUN CHEMICAL**

1250 E. Belmont St.

Ontario, CA 91761

Call: 909-930-1688

Information / Emergency Telephone**PERS (Professional Emergency Resource Services)**

Domestic Shipments and to Canada: 1-800-633-8253

International Shipments: 1-801-629-0667

2. Hazard Identification

GHS-US Classification

Acute toxicity, Oral (Category 4), H302

Skin corrosion (Category 1B), H314

Serious eye damage (Category 1), H318

Acute toxicity, Oral (Category 4), H332

Acute aquatic toxicity (Category 1), H400

Chronic aquatic toxicity (Category 1), H410

GHS-US Label elements**Pictogram****GHS-US Signal word: DANGER****GHS-US Hazard statements**

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

H332: Harmful if inhaled

H400: Very toxic to aquatic life

H410: Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P202: Do not handle until all safety precautions have been read and understood.

P261: Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P262: Do not get in eyes, on skin, or on clothing.

P264: Wash hands and other exposed area thoroughly after handling.

P301 + P330 + P331+ P312: IF SWALLOWED Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER/ doctor/ medical personnel if you feel unwell.

P303 + P361 + P351 + P333 + P313: IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse cautiously with water for several minutes. If skin irritation or rash occurs: Get medical advice/attention.

P304 + P340 + P342 + P311: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

P305 + P351 + P338 + P337 + P313: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

P363: Wash contaminated clothing before reuse.

P390: Absorb spillage to prevent material damage.

P405: Store locked up.

P501: Dispose of contents/ container to an approved waste disposal plant in accordance with federal, state and local environmental control regulations.

3. Composition/ Information on Ingredients

Synonyms: Zinc dichloride fume; Zinc dichloride; Zinc chloride fume; Zinc butter

CAS No: 7646-85-7

Molecular Formula: ZnCl_2

Molecular Weight: 136.30 g/ mol

Appearance: White powder

Zinc Chloride: 97% Min

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, occasionally lifting the upper and lower lids. Get medical attention if irritation occurs.

Skin Contact

Remove any contaminated clothing. Wipe off excess from skin. Wash skin with soap and flush with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.

Inhalation

If inhaled, remove to fresh air immediately and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention for any breathing difficulty.

Ingestion

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

5. Fire Fighting Measures

Special hazards arising from the substance or mixture

Hydrogen chloride gas, Zinc / zinc oxides

Fire-fighting equipment/ instructions

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Suitable extinguishing media such as water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

6. Accidental Release Measures**Personal precautions, protective equipment, and emergency procedures**

Use proper personal protective equipment as indicated in Section 8. Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of dust from the spilled material. Ensure adequate ventilation.

Containment and Cleaning up

Handle in accordance with industrial hygiene and safety practices. Use appropriate tools to put the spilled solid in a convenient waste disposal container. Avoid generating dusty conditions. Finish cleaning the contaminated surface and dispose of according to local and regional authority requirements.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

7. Handling and Storage**Personal Precautions**

Avoid breathing dust, vapor, mist, or gas. Avoid contact with eyes, skin, and clothing. Do not swallow. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Wash hands and other exposed areas with mild soap and water after handling. Handle in accordance with good industrial hygiene and safety procedures.

Storage

Keep container tightly closed. Keep container in a cool, well-ventilated area. Keep container dry. Keep away from heat. Keep away from sources of ignition. Keep away from combustible material.

8. Exposure Controls / Personal Protection**Exposure Limit**

No data available

Engineering Controls

Use adequate ventilation to keep airborne concentrations low. It is also necessary that facility equipped with a safety eyewash and shower to wash chemicals off a person in the event of a chemical spill.

Personal Protective Equipment

Eyes: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin: Wear appropriate protective gloves to prevent skin exposure. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

9. Physical and Chemical Properties

Appearance: White powder

Zinc Chloride: 97% Min

Iron as Fe: 0.0005% Max

Lead as Pb: 0.0005% Max

Sulfate: 0.01% Max

ZnO: 2.0% Max

Barium (Ba): 0.1%

Insoluble Substance in Acid HCl: 0.1%

Zinc sheet corrosion: Passes

Melting Point: 290°C

Boiling Point: 723°C

Fire: Zinc chloride is not considered to be a fire hazard.

Explosion: Zinc Chloride is not considered to be an explosion hazard.

Auto-ignition Temperature: No data available

Flash Point: No data available

Explosion Limits, Lower: No data available

Explosion Limits, Upper: No data available

Flammability of the Product: No data available

Flammable Limits: No data available

Specific Gravity: 2.91

Solubility in Water: 423 g/ 100 g

pH: 4

Odor: No data available

Odor Threshold: No data available

Evaporation rate: No data available

Vapor pressure: No data available

Vapor density: No data available

Relative density: No data available

Viscosity: No data available

Oxidizing properties: No data available

10. Stability and Reactivity

Stability: Stable under ordinary conditions

Reactivity: No data available

Conditions to Avoid: Moisture, excess heat.

Incompatibilities with other materials: Strong oxidizing agents.

Hazardous decomposition products: Hydrogen chloride, toxic fumes of zinc oxide.

Hazardous Polymerization: Will not occur.

11. Toxicological Information

Acute toxicity**RTECS#:** CAS# 7646-85-7: ZH1400000**LD50/LC50:** CAS# 7646-85-7: Oral, mouse: LD50 = 329 mg/kg; Oral, rat: LD50 = 350 mg/kg.**Skin corrosion/ irritation**

No data available

Serious eye damage/ eye irritation

No data available

Respiratory or skin sensitization

No data available

Carcinogenicity

The components of this product are not listed as carcinogen by ACGIH, IARC, NIOSH, NTP, or OSHA

Special Remarks on Toxicity to Animals: No data available**Special Remarks on Chronic Effects on Humans:** No data available**Special Remarks on other Toxic Effects on Humans:** No data available

12. Ecological Information**General notes:** Do not allow material to be released to the environment without proper governmental permits.**Toxicity****Toxicity to fish LC50**

Cyprinus carpio (Carp) - 0.4 - 2.2 mg/l - 96.0 h

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 0.2 mg/l - 48 h

Toxicity to algae Growth inhibition LOEC

Pseudokirchneriella subcapitata - 12.5 mg/l - 96 h

13. Disposal Information**Waste Disposal**

Keep out of sewers and waterways. Waste must be disposed of in accordance with federal, state and local environmental control regulations. Contact a specialist disposal company or the local waste regulator for advice. Empty containers must be decontaminated before returning for recycling.

14. Transport Information**US DOT**

UN/NA: 2331

Proper Shipping Name: Zinc Chloride, Anhydrous

Hazard Class: 8

Packing Group: III

IMDG/ IATA

UN/NA: 2331

Proper Shipping Name: Zinc Chloride, Anhydrous
Hazard Class: 8
Packing Group: III

RID/ADR/ IMO

Shipping Name: Zinc Chloride, Anhydrous
Hazard Class: 8
UN Number: 2331
Packing group: III

Refer to IMO

15. Regulatory Information**US Federal****TSCA Inventory**

CAS# 7646-85-7 is listed on the TSCA Inventory.

SARA 302

No chemicals are reportable under Section 302

US State**State Right to Know:**

This chemical is listed on the following state right to know lists: Massachusetts, New Jersey, Pennsylvania.

California Regulations**California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)**

This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: C

Risk Phrases: R 34 Causes burns.

Safety Phrases: S 7/8 Keep container tightly closed and dry.

S 28A After contact with skin, wash immediately with plenty of water.

WGK (Water Danger/Protection)

CAS# 7646-85-7: 1

United Kingdom Occupational Exposure Limits

CAS# 7646-85-7: OES-United Kingdom, TWA 1 mg/m³ TWA (fume)

CAS# 7646-85-7: OES-United Kingdom, STEL 2 mg/m³ STEL (fume)

United Kingdom Maximum Exposure Limits

Canada

CAS# 7646-85-7 is listed on Canada's DSL List.

CAS# 7646-85-7 is listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 7646-85-7: OEL-ARAB Republic of Egypt: TWA 1 mg/m³ (fume)

OEL-AUSTRALIA: TWA 1 mg/m³; STEL 2 mg/m³ (fume)

OEL-BELGIUM: TWA 1 mg/m³; STEL 2 mg/m³ (fume)

OEL-DENMARK: TWA 0.5 mg/m³ (fume)

OEL-FINLAND: TWA 1 mg/m³ (fume)

OEL-FRANCE: TWA 1 mg/m³ (fume)

OEL-THE NETHERLANDS: TWA 1 mg/m³ (fume)
OEL-THE PHILIPPINES: TWA 1 mg/m³ (fume)
OEL-SWEDEN: TWA 1 mg/m³ (fume)
OEL-SWITZERLAND: TWA 1 mg/m³ (fume)
OEL-THAILAND: TWA 1 mg/m³ (fume)
OEL-TURKEY: TWA 1 mg/m³ (fume)
OEL-UNITED KINGDOM: TWA 1 mg/m³; STEL 2 mg/m³ (fume)
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

16. Other Information

HMIS Rating

Health: 3

Flammability: 0

Physical Hazard: 0

Personal Protection:

NFPA Rating

Health: 3

Flammability: 0

Instability: 0

Special Hazards:

Revision Date: May 23, 2025

THE INFORMATION ABOVE IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. HOWEVER, WINTERSUN CHEMICAL MAKE NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO SUCH INFORMATION, AND WE ASSUME 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 WAY SHALL THE COMPANY 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 THE COMPANY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.