



HI-VALLEY CHEMICAL

LABORATORY PRODUCTS

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SAFETY DATA SHEET

Hi Valley Chemical

Zinc Chloride

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Zinc Chloride
Synonyms: Zinc Dichloride, Zinc Butter
SDS Number: R-070
Product Code: 518170-500, 518170-5, 518170-10, 518170-15, 518170-50
CAS Number: 7646-85-7
Chemical Formula: ZnCl₂
Supplier Details: High Valley Products, Inc.
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2 HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

- Health, Acute toxicity, 4 Oral
- Health, Skin corrosion/irritation, 1 B
- Health, Serious Eye Damage/Eye Irritation, 1
- Environmental, Hazards to the aquatic environment - Acute, 1
- Environmental, Hazards to the aquatic environment - Chronic, 1

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:



GHS Hazard Statements:

- H302 - Harmful if swallowed
- H314 - Causes severe skin burns and eye damage
- H318 - Causes serious eye damage
- H400 - Very toxic to aquatic life
- H410 - Very toxic to aquatic life with long lasting effects

GHS Precautionary Statements:

- P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
- P264 - Wash skin thoroughly after handling.
- P270 - Do not eat, drink or smoke when using this product.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P303+361+353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor/physician.
P321 - Specific treatment (see First Aid on this label).
P363 - Wash contaminated clothing before reuse.
P391 - Collect spillage.
P405 - Store locked up.
P501 - Dispose of contents/container according to local regulations.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas#	%	Chemical Name
7646-85-7		zinc chloride, anhydrous

4 FIRST AID MEASURES

Inhalation: If inhaled, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
Skin Contact: Remove contaminated clothing immediately. Wash with soap and water. Consult a physician.
Eye Contact: Flush with large amounts of water. Consult a physician.
Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5 FIRE FIGHTING MEASURES

Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture
No data available

Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

Further information
No data

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions:
Do not let product enter drains.

Methods and materials for containment and cleaning up:
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

7 HANDLING AND STORAGE

Handling Precautions: Avoid contact with eyes, skin, or clothing. Avoid formation of dust. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.

Storage Requirements: Protect container and its fittings from physical damage.
Store in cool/dry, well ventilated area. Keep container tightly closed.

Personal Protective Equipment:

Zinc chloride, anhydrous (7646-85-7) []

Personal protective equipment

Eye/face protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact: Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested: Dermatril (KCL 740 / Aldrich Z677272, Size M)

Splash contact: Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested: Dermatril (KCL 740 / Aldrich Z677272, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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

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Components with workplace control parameters

TWA	1 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
TWA	1 mg/m3	USA. ACGIH Threshold Limit Values (TLV) Upper Respiratory Tract & Lower Respiratory Tract irritation
STEL	2 mg/m3	USA. ACGIH Threshold Limit Values (TLV) Upper Respiratory Tract & Lower Respiratory Tract irritation
TWA	1 mg/m3	USA. NIOSH Recommended Exposure Limits
ST	2 mg/m3	USA. NIOSH Recommended Exposure Limits
TWA	1 mg/m3	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
STEL	2 mg/m3	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000

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PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White crystalline	Odor:	None
Physical State:	Solid	Molecular Formula:	ZnCl ₂
Odor Threshold:	No data available	Solubility:	No data available
Spec Grav./Density:	2.91	Freezing/Melting Pt.:	290C (554F)
Viscosity:	No data available	Flash Point:	No data available
Boiling Point:	732C (1350F)	Vapor Density:	No data available
Flammability:	No data available.	Auto-Ignition Temp:	No data available
Partition Coefficient:	No data available	UFL/LFL:	No data available
Vapor Pressure:	No data available		
pH:	5 at 100 g/l at 20C (68F)		
Evap. Rate:	No data available		
Molecular weight:	136.3		
Decomp Temp:	No data available		

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STABILITY AND REACTIVITY

Reactivity:	No data available
Chemical Stability:	Stable under recommended storage conditions.
Conditions to Avoid:	Moisture.
Materials to Avoid:	Strong Oxidizing Agents.
Hazardous Decomposition:	Hydrogen chloride gas, zinc/zinc oxides.

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TOXICOLOGICAL INFORMATION

Zinc chloride, anhydrous (7646-85-7) []

Information on toxicological effects

Acute toxicity:

LD50 Oral - rat - 350 mg/kg

Inhalation: no data available

Dermal: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional Information:

RTECS: ZH1400000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Liver - Irregularities - Based on Human Evidence

12 ECOLOGICAL INFORMATION

Zinc chloride, anhydrous (7646-85-7) []

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - *Cyprinus carpio* (Carp) - 0.4 - 2.2 mg/l - 96.0 h.

Toxicity to daphnia and EC50 - *Daphnia magna* (Water flea) - 0.2 mg/l - 48 h.

other aquatic invertebrates

Toxicity to algae Growth inhibition LOEC - *Pseudokirchneriella subcapitata* - mg/l - 96 h.

Persistence and degradability: no data available

Bioaccumulative potential: Bioaccumulation *Pimephales promelas* (fathead minnow) - 63 d

Bioconcentration factor (BCF): 21,000

Mobility in soil: no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

13 DISPOSAL CONSIDERATIONS

Zinc chloride, anhydrous (7646-85-7) []

Waste treatment methods

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging: Dispose of as unused product.

14 TRANSPORT INFORMATION

UN2331, Zinc chloride, anhydrous, 8, PGIII

15 REGULATORY INFORMATION

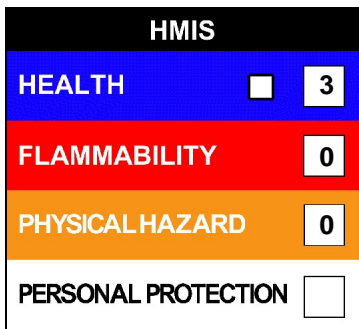
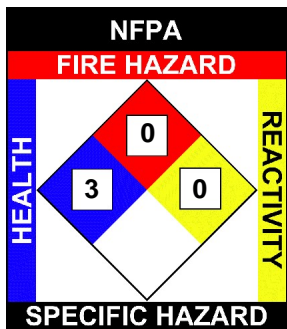
Component (CAS#) [%] - CODES

Regulatory CODE Descriptions

- RQ = Reportable Quantity
- CERCLA = Superfund clean up substance
- CSWHS = Clean Water Act Hazardous substances
- EPCRAWPC = EPCRA Water Priority Chemicals
- MASS = MA Massachusetts Hazardous Substances List
- OSHA = OSHA workplace Air Contaminants
- PA = PA Right-To-Know List of Hazardous Substances
- TSCA = Toxic Substances Control Act
- TXAIR = TX Air Contaminants with Health Effects Screening Level

16 OTHER INFORMATION

NFPA: Health = 3, Fire = 0, Reactivity = 0, Specific Hazard = n/a
HMIS III: Health = 3, Fire = 0, Physical Hazard = 0



Disclaimer:

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