

MATERIAL SAFETY DATA SHEET

Chemical Product

Product Name: Zinc acetate

CAS#: 5970-45-6

Synonym: Acetic acid, zinc salt, dihydrate; Zinc diacetate, dihydrate

Chemical Name: Zinc Acetate, dehydrate

Chemical Formula: $(CH_3COO)_2 \cdot Zn \cdot 2H_2O$ or $C_4H_6O_4 \cdot Zn \cdot 2H_2O$

Composition and Information on Ingredients

Name	S.K.U	% by Weight
Zinc acetate	GCS-8578	100

Hazards Identification

Potential Acute Health Effects:

Hazardous in case of eye contact (irritant). Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available.

The substance may be toxic to kidneys. Repeated or prolonged exposure to the substance can produce target organs damage.

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. Get medical attention if irritation occurs.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact: Not available.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or

waistband.

Serious Ingestion: Not available.

Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: These products are carbon oxides (CO, CO₂). Some metallic oxides.

Fire Hazards in Presence of Various Substances: Slightly flammable to flammable in presence of heat.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: When heated to decomposition it emits acrid smoke and irritating fumes of zinc oxide.

Special Remarks on Explosion Hazards: Not available.

Accidental Release Measures

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Handling and Storage

Precautions:

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Avoid contact with eyes. Wear

suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.

Storage:

Keep container tightly closed. Keep container in a cool, well-ventilated area.

Exposure Controls/Personal Protection**Engineering Controls:**

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:

Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. 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.

Exposure Limits: Not available.

Physical and Chemical Properties

Physical state and appearance:	Solid. (slightly efflorescent)
Odor:	vinegar-like (acetous) (Slight.)
Taste:	Astringent.
Molecular Weight:	219.5 g/mole
Color:	White.
pH (1% soln/water):	Not available.
Boiling Point:	Not available.
Melting Point:	237°C (458.6°F)
Critical Temperature:	Not available.
Specific Gravity:	1.735 (Water = 1)
Vapor Pressure:	Not applicable.
Vapor Density:	Not available.
Volatility:	Not available.
Odor Threshold:	Not available.
Water/Oil Dist. Coeff.:	Not available.
Ionicity (in Water):	Not available.
Dispersion Properties:	See solubility in water.
Solubility:	Easily soluble in hot water. Soluble in cold water. Solubility in water: 1 gram dissolves in 2.3 ml water, 1.6 ml boiling water.

Solubility in alcohol: 1 gram dissolves in 30 ml alcohol, 1 ml boiling alcohol.

Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Excess heat, incompatible materials Incompatibility with various substances:

Reactive with oxidizing agents.. Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Loses 2H₂O at 100 deg. C.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD₅₀): 287 mg/kg [Mouse]

Chronic Effects on Humans: May cause damage to the following organs: kidneys.

Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: May affect genetic material (mutagenic).

May cause adverse reproductive effects based on animal test data

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: Causes eye irritation.

Ingestion: May be harmful if swallowed. May cause irritation of the digestive tract.

Symptoms may include stomach cramps, stricture of the esophagus, nausea, vomiting.

Inhalation: May cause respiratory tract (nose, throat) irritation causing coughing, and wheezing. Chronic Potential Health Effects: Ingestion: Prolonged or repeated ingestion may affect the blood, urinary system (kidneys).

Toxicological Data on Ingredients: Zinc acetate: ORAL (LD₅₀): Acute: 794 mg/kg [Rat]. 287 mg/kg [Mouse].

Ecological Information

Ecotoxicity: Not available.

BOD₅ and COD: Not available.

Products of 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 more toxic.

Special Remarks on the Products of Biodegradation: Not available.

Disposal Considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Transformation Information

Land transport (ADR-RID)

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

UN N°: 3077

H.I. nr: 90

ADR - Class: 9

Sea transport (IMDG) [English only]

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

UN N°: 3077

IMO-IMDG - Class or division: 9: Miscellaneous dangerous substances and articles.

IMO-IMDG - Packing group: III

Air transport (ICAO-IATA) [English only]

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

UN N°: 3077

IATA - Class or division: 9: Miscellaneous dangerous substances and articles.

IATA - Packing group: III

S

Other Regulatory Information

Federal and State Regulations:

Illinois chemical safety act: Zinc acetate (Cas No. 557-34-6) New York release reporting list: Zinc acetate (Cas No. 557-34-6) Pennsylvania RTK: Zinc acetate (Cas No. 557-34-6) Massachusetts RTK: Zinc acetate (Cas No. 557-34-6) Massachusetts spill list: Zinc acetate (Cas No. 557-34-6) New Jersey: Zinc acetate (Cas No. 557-34-6) New Jersey spill list: Zinc acetate (Cas No. 557-34-6) Louisiana spill reporting: Zinc acetate (Cas No. 557-34-6) California Director's List of Hazardous Substances: Listed as Zinc compounds SARA 313 toxic chemical notification and release reporting: Listed as Zinc compounds CERCLA: Hazardous substances.: Zinc acetate (Cas No. 557-34-6): 1000 lbs. (453.6 kg)

Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). Zinc Acetate (CAS no. 557-34-6) is listed on the Canadian DSL, but Zinc Acetate, dihydrate (CAS no. 5970-45-6) is not listed on the Canadian DSL

Other Classifications:

WHMIS (Canada): CLASS D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC): R22- Harmful if swallowed. R36- Irritating to eyes. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S39- Wear eye/face protection.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

National Fire Protection
Association (U.S.A.): Health:
2

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.

Additional Information

References: Not available.

Other Special Considerations: Not available.

Disclaimer:

The information contained herein in good faith but makes no representations as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.



makes no representations or warranties, either express or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with

respect to the information set forth herein or the product to which the information refers. Accordingly,  will not be responsible for damages resulting from use of or reliance upon this information.