

# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** Zinc Acetate, Dihydrate

**Other means of identification**

**Product No.:** 4296, 4304, 8740

**Recommended use and restriction on use**

**Recommended use:** For Laboratory, Research or Manufacturing Use.

**Restrictions on use:** Not determined.

**Details of the supplier of the safety data sheet**

	Avantor Performance Materials, LLC 100 Matsonford Rd, Suite 200 Radnor, PA 19087
Telephone:	Customer Service: 855-282-6867
Fax:	
Contact Person:	Product Information Compliance
E-mail:	info@avantormaterials.com

**Emergency telephone number:**

CHEMTREC: 1-800-424-9300 within US and Canada (24 hrs/day, 7 days/week)

## 2. Hazard identification

**Hazard Classification**

**Health Hazards**

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A
Specific Target Organ Toxicity - Single Exposure	Category 3 <sup>1</sup>

**Target Organs**

1.respiratory tract irritation

**Unknown toxicity - Health**

Acute toxicity, dermal	100 %
Acute toxicity, inhalation, dust or mist	100 %

**Environmental Hazards**

Acute hazards to the aquatic environment	Category 1
Chronic hazards to the aquatic environment	Category 1

**Unknown toxicity - Environment**

Acute hazards to the aquatic environment	0 %
Chronic hazards to the aquatic environment	100 %

**Label Elements**

**Hazard Symbol:**



**Signal Word:** Warning

**Hazard Statement:** Causes skin irritation.  
Causes serious eye irritation.  
May cause respiratory irritation.  
May form combustible dust concentrations in air.  
Very toxic to aquatic life with long lasting effects.

**Precautionary Statements**

**Prevention:** Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust. Use only outdoors or in a well-ventilated area. Avoid release to the environment.

**Response:** IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing. 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. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. Collect spillage.

**Storage:** Store in a well-ventilated place. Keep container tightly closed. Store locked up.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Other hazards which do not result in GHS classification:** None.

**3. Composition/information on ingredients**

**Substances**

Chemical name	Common name and synonyms	CAS number	Content in percent (%)*
Zinc acetate, dihydrate		5970-45-6	98,0 - 100,0%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#### 4. First-aid measures

<b>General information:</b>	Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.
<b>Ingestion:</b>	Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
<b>Inhalation:</b>	Move to fresh air. Get medical attention if symptoms persist.
<b>Skin Contact:</b>	Rinse with water. Get medical attention if symptoms occur.
<b>Eye contact:</b>	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention.

#### Most important symptoms/effects, acute and delayed

<b>Symptoms:</b>	Irritating to eyes, respiratory system and skin.
<b>Hazards:</b>	Irritant.

#### Indication of immediate medical attention and special treatment needed

<b>Treatment:</b>	Treat symptomatically. Symptoms may be delayed.
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#### 5. Fire-fighting measures

<b>General Fire Hazards:</b>	Powdered material may form explosive dust-air mixtures.
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#### Suitable (and unsuitable) extinguishing media

<b>Suitable extinguishing media:</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media:</b>	None known.

<b>Specific hazards arising from the chemical:</b>	Dust may form explosive mixture with air.
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#### Special protective equipment and precautions for firefighters

<b>Special fire fighting procedures:</b>	Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.
<b>Special protective equipment for fire-fighters:</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures:</b>	Keep unauthorized personnel away. Keep upwind. Ventilate closed spaces before entering them. Avoid inhalation of dust. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
<b>Methods and material for containment and cleaning up:</b>	Avoid dust formation. Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination.

<b>Notification Procedures:</b>	Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Inform authorities if large amounts are involved.
<b>Environmental Precautions:</b>	Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

**7. Handling and storage**

<b>Precautions for safe handling:</b>	Avoid generation and spreading of dust. Dust may form explosive mixture with air. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Use non-sparking hand tools and explosion-proof electrical equipment. Ground container and transfer equipment to eliminate static electric sparks. Avoid breathing dust or vapor. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Wash hands thoroughly after handling. See Section 8 of the SDS for Personal Protective Equipment.
<b>Conditions for safe storage, including any incompatibilities:</b>	Keep container tightly closed. Store in a well-ventilated place.

**8. Exposure controls/personal protection**

**Control Parameters**

**Occupational Exposure Limits**

None of the components have assigned exposure limits.

**Appropriate Engineering Controls**

No data available.

**Individual protection measures, such as personal protective equipment**

<b>General information:</b>	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
<b>Eye/face protection:</b>	Wear safety glasses with side shields (or goggles).
<b>Skin Protection</b>	
<b>Hand Protection:</b>	Chemical resistant gloves
<b>Other:</b>	Wear suitable protective clothing.
<b>Respiratory Protection:</b>	In case of inadequate ventilation use suitable respirator.
<b>Hygiene measures:</b>	Provide eyewash station and safety shower. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties**

**Appearance**

<b>Physical state:</b>	Solid
<b>Form:</b>	Crystals or powder.

<b>Color:</b>	White
<b>Odor:</b>	Slight acetic acid odor
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	6,0 - 7,0 (25 °C) (5% aqueous solution)
<b>Melting point/freezing point:</b>	237 °C
<b>Initial boiling point and boiling range:</b>	No data available.
<b>Flash Point:</b>	Not applicable
<b>Evaporation rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Flammability limit - upper (%):</b>	No data available.
<b>Flammability limit - lower (%):</b>	No data available.
<b>Explosive limit - upper (%):</b>	No data available.
<b>Explosive limit - lower (%):</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	No data available.
<b>Density:</b>	1,74 g/cm <sup>3</sup> (20 °C)
<b>Relative density:</b>	1,74 (20 °C)
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	522 g/l (20 °C)
<b>Solubility (other):</b>	alcohol: 40,0 g/l (20 °C)
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.
<b>Other information</b>	
<b>Molecular weight:</b>	219,5 g/mol ((CH <sub>3</sub> COO) <sub>2</sub> Zn·2H <sub>2</sub> O)

## 10. Stability and reactivity

<b>Reactivity:</b>	No dangerous reaction known under conditions of normal use.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid:</b>	Heat, sparks, flames. Contact with incompatible materials.
<b>Incompatible Materials:</b>	Strong oxidizing agents. Alkalies.
<b>Hazardous Decomposition Products:</b>	By heating and fire, toxic vapors/gases may be formed.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation:</b>	May cause irritation to the respiratory system.
<b>Skin Contact:</b>	Causes skin irritation.
<b>Eye contact:</b>	Causes serious eye irritation.

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

**Information on toxicological effects**

**Acute toxicity (list all possible routes of exposure)**

**Oral**  
**Product:** LD 50 (Rat): 2.460 - 3.010 mg/kg

**Dermal**  
**Product:** No data available.

**Inhalation**  
**Product:** LC 50 (Rat): > 7,79 mg/l

**Repeated dose toxicity**  
**Product:** No data available.

**Skin Corrosion/Irritation**  
**Product:** Causes skin irritation.

**Serious Eye Damage/Eye Irritation**  
**Product:** Causes serious eye irritation.

**Respiratory or Skin Sensitization**  
**Product:** Not a skin nor a respiratory sensitizer.

**Carcinogenicity**  
**Product:** This substance has no evidence of carcinogenic properties.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**  
No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**  
No carcinogenic components identified

**ACGIH Carcinogen List:**  
No carcinogenic components identified

**Germ Cell Mutagenicity**

**In vitro**  
**Product:** No mutagenic components identified

**In vivo**  
**Product:** No mutagenic components identified

**Reproductive toxicity**  
**Product:** No components toxic to reproduction

**Specific Target Organ Toxicity - Single Exposure**  
**Product:** Respiratory tract irritation.

**Specific Target Organ Toxicity - Repeated Exposure**  
**Product:** None known.

**Aspiration Hazard**

**Product:** Not classified  
**Other effects:** None known.

## 12. Ecological information

### Ecotoxicity:

#### Acute hazards to the aquatic environment:

##### Fish

**Product:** No data available.

##### Specified substance(s):

Zinc acetate, dihydrate LC 50 (Fathead minnow (Pimephales promelas), 96 h): calculated 0,576 - 1,37 mg/l  
LC 50 (Fathead minnow (Pimephales promelas), 8 d): calculated 0,156 - 1,74 mg/l

##### Aquatic Invertebrates

**Product:** No data available.

##### Specified substance(s):

Zinc acetate, dihydrate LC 50 (Brown mussel (Perna indica), 48 h): calculated 2,56 - 2,94 mg/l

#### Chronic hazards to the aquatic environment:

##### Fish

**Product:** No data available.

##### Aquatic Invertebrates

**Product:** No data available.

##### Toxicity to Aquatic Plants

**Product:** No data available.

### Persistence and Degradability

#### Biodegradation

**Product:** There are no data on the degradability of this product.

#### BOD/COD Ratio

**Product:** No data available.

### Bioaccumulative potential

#### Bioconcentration Factor (BCF)

**Product:** No data available on bioaccumulation.

### Partition Coefficient n-octanol / water (log Kow)

**Product:** No data available.

**Mobility in soil:** No data available.

**Other adverse effects:** Very toxic to aquatic life with long lasting effects.

### 13. Disposal considerations

**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local laws.

**Contaminated Packaging:** Since emptied containers retain product residue, follow label warnings even after container is emptied.

### 14. Transport information

#### TDG

UN Number: UN 3077  
 UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Zinc acetate)  
 Transport Hazard Class(es)  
 Class: 9  
 Label(s): 9  
 Packing Group: III  
 Marine Pollutant: Yes  
 Special precautions for user: Not determined.

#### IMDG

UN Number: UN 3077  
 UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Zinc acetate)  
 Transport Hazard Class(es)  
 Class: 9  
 Label(s): 9  
 EmS No.: F-A, S-F  
 Packing Group: III  
 Marine Pollutant: Yes  
 Special precautions for user: Marine pollutants packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 Kg or less for solids are not subject to any other provisions of this Code relevant to marine pollutants provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. In case of marine pollutants also meeting criteria for inclusion in another hazard class, all provisions of this Code relevant to any additional hazards continue to apply.

#### IATA

UN Number: UN 3077  
 UN Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s.(Zinc acetate)  
 Transport Hazard Class(es):  
 Class: 9  
 Label(s): 9(Miscellaneous)  
 Packing Group: III  
 Marine Pollutant: Yes  
 Special precautions for user: Marine pollutants when transported in single or combination packagings containing a net quantity per single or inner packaging of 5 Kg or less for solids are not subject to any other provisions of the IATA regulations relevant to marine pollutants provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.  
 Cargo aircraft only: Allowed.

**Transport in bulk according to Annex II of MARPOL and the IBC Code:** Not applicable



## 15. Regulatory information

### Canada Federal Regulations

#### List of Toxic Substances (CEPA, Schedule 1)

##### Chemical Identity

Zinc acetate, dihydrate

#### Export Control List (CEPA 1999, Schedule 3)

Not Regulated

#### National Pollutant Release Inventory (NPRI)

##### Canada. National Pollutant Release Inventory (NPRI) Substances, Part 5, VOCs with Additional Reporting Requirements

NPRI PT5                                      Not Regulated

##### Canada. National Pollutant Release Inventory (NPRI) (Schedule 1, Parts 1-4)

NPRI    Zinc acetate, dihydrate

### Greenhouse Gases

Not Regulated

### Controlled Drugs and Substances Act

CA CDSI	Not Regulated
CA CDSII	Not Regulated
CA CDSIII	Not Regulated
CA CDSIV	Not Regulated
CA CDSV	Not Regulated
CA CDSVII	Not Regulated
CA CDSVIII	Not Regulated

### Precursor Control Regulations

Not Regulated

### International regulations

#### Montreal protocol

Not applicable

#### Stockholm convention

Not applicable

#### Rotterdam convention

Not applicable

#### Kyoto protocol

Not applicable

**Inventory Status:**

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
Japan (ENCS) List:	On or in compliance with the inventory
Japan ISHL Listing:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Mexico INSQ:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Philippines PICCS:	On or in compliance with the inventory
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
EINECS, ELINCS or NLP:	On or in compliance with the inventory

**16. Other information**

**Revision Date:** 05.08.2020

**Version #:** 2.2

**Source of information:** Sources of information used in preparing this SDS included one or more of the following: results from in house or supplier toxicology studies, information from the Toxicology Data Network (TOXNET), European Chemical Agency (ECHA) substance dossiers, IARC Monographs, US National Toxicology Program data, the Agency for Toxic Substances and Disease Registry, other manufacturer's SDSs and other sources, as appropriate.

**Further Information:** No data available.

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