Safety Data Sheet

Version 1.6
Revision Date 04/05/2024

1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	**Zinc acetate dihydrate**
Product Number	:	DZA
CAS Number	:	5970-45-6
EC Number	:	209-170-2
Brand	:	ISOFLEX
Supplier	:	ISOFLEX USA 1801 Lombard St SAN FRANCISCO CA 94123 USA
Telephone	:	+1 415-440-4433
Fax	:	+1 415-563-4433
Emergency Phone # (for both supplier and manufacturer)	:	Infotrac/ +1 800-535-5053
Preparation Information:		ISOFLEX USA Product Safety +1 415-440-4433

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture


GHS07

Acute Toxicity 4 H302 Harmful if swallowed.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC


Harmful

Harmful if swallowed.


Dangerous for the environment

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Information concerning particular hazards for human and environment: Not applicable.

Label elements

Labelling according to EU guidelines:

The product has been classified and marked in accordance with directives on hazardous materials.

Code letter and hazard designation of product:


Harmful

Dangerous for the environment

Risk phrases:

Harmful if swallowed.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

Avoid contact with skin and eyes.

Avoid release to the environment. Refer to special instructions/safety data sheets.

Classification system:

NFPA ratings (scale 0 – 4)

Health = 2
Fire = 0
Reactivity = 0

HMIS ratings (scale 0 – 4)

Health = 2
Fire = 0
Reactivity = 0

Other hazards:

Results of PBT and vPvB assessment: Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : $(CH_3COO)_2$ Zn $2H_2O$ or $C_4H_6O_4Zn \cdot 2H_2O$
Molecular Weight : 219.51 g/mol

Component
Zinc di(acetate)
CAS Number 5970-45-6 EC Number 209-170-2

4. FIRST AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Conditions of flammability
Not flammable or combustible.

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

Special protective equipment for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

Additional information
Dispose of fire debris and contaminated firefighting water in accordance with official regulations.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

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.

Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7. HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.
Keep in a dry place.

Recommended storage temperature: 15-25 ºC

Storage class: 10-13

Specific end use(s): No further relevant information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection
For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Protective gloves

The glove material must be impermeable and resistant to the product/the substance/the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves depends not only on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material

The exact breakthrough time must be determined by the manufacturer of the protective gloves and must be observed by the user.

For full contact, gloves made with the following specifications are suitable:

Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.11 mm
Value for the permeation: Level ≥ 480 minutes

For splash contact, gloves made with the following specifications are suitable:

Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.11 mm
Value for the permeation: Level ≥ 480 minutes

Eye protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and 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.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Form	Powder
Color	White
Safety data	
pH	6.0 - 8.0 at 50 g/l at 25 °C (77 °F)
Melting point/freezing point	Melting point/range: 237 °C (459 °F)
Boiling point	No data available
Flash point	No data available
Flammability (solid, gaseous)	Product is not flammable
Ignition temperature	No data available
Auto-ignition temperature	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapor pressure	No data available
Density at 20 ºC (68 ºF)	1.840 g/cm^3 (15.355 lb/gal)
Bulk density at 20 ºC (68 ºF)	~900 kg/m^3
Relative density	No data available
Vapor density	No data available
Evaporation rate	No data available
Solubility in/miscibility with water at 20 ºC (68 ºF)	430 g/l
Partition coefficient: n-octanol/water	No data available
Relative vapor density	No data available
Odor	No data available
Odor threshold	No data available
Evaporation rate	No data available

10. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended storage conditions
Possibility of hazardous reactions	No data available
Conditions to avoid	No data available
Materials to avoid	Oxidizing agents
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions - Carbon oxides, zinc/zinc oxides.
Other decomposition products	No data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50
LD50 Oral - rat - 794 mg/kg
Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Miosis (pupillary constriction). Vascular: BP elevation not characterized in autonomic section. Nutritional and Gross Metabolic: Weight loss or decreased weight gain.

Inhalation LC50
No data available

Dermal LD50
No data available

Other information on acute toxicity
No data available

Skin corrosion/irritation
Mild skin irritation - 24 h

Serious eye damage/eye irritation
Moderate eye irritation - 24 h

Respiratory or skin sensitization
Irritant to skin and mucous membranes

Germ cell mutagenicity
Genotoxicity in vitro - human - lymphocyte
Cytogenetic analysis

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

Teratogenicity
No data available

Specific target organ toxicity - single exposure (Globally Harmonized System)
No data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)
No data available

Potential health effects
Ingestion Harmful if swallowed.

Signs and symptoms of exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional information
RTECS: ZG8750000

12. ECOLOGICAL INFORMATION

Toxicity:

Persistence and degradability No data available

Behavior in environmental systems:

Bioaccumulative potential No data available

Mobility in soil No data available

Ecotoxical effects:

Remark Very toxic for fish

Additional ecological information:

General notes Water hazard class 3 (self-assessment); extremely hazardous for water
Poisonous for fish and plankton in bodies of water
Do not allow to enter bodies of water, waste water or soil
Very toxic for aquatic organisms

PBT and vPvB assessment: No data available

Other adverse effects: No data available

13. DISPOSAL CONSIDERATIONS

Product
Do not allow product to reach sewage system. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging
Disposal must be made according to official regulations. Dispose of contaminated packaging in the same manner as the product.

14. TRANSPORT INFORMATION

UN Number (DOT, ADR, IMDG, IATA) UN3077

UN proper shipping name

DOT, IMDG, IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc acetate)

ADR 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc acetate)

Transport hazard class(es)

DOT, IMDG

Class 9 Miscellaneous dangerous substances and articles
Label 9

ADR

Class 9 (M7) Miscellaneous dangerous substances and articles
Label 9

IATA

Class 9 Miscellaneous dangerous substances and articles
Label 9

Packing group
(DOT, ADR, IMDG, IATA) III

Environmental Hazards

Marine Pollutant:
Special Marking (ADR, IATA)

Special precautions for user Warning: Miscellaneous dangerous substances and articles
Danger code (Kemler) 90
EMS Number F-A,S-F

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

UN "Model Regulation" UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc acetate), 9, III

15. REGULATORY INFORMATION

OSHA Hazards
Harmful by ingestion, irritant

SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
The following components are subject to reporting levels established by SARA Title III, Section 313:

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SARA 311/312 Hazards
Acute Health Hazard

Massachusetts Right To Know Components

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Pennsylvania Right To Know Components

Zinc di(acetate)	CAS-No.:	5970-45-6	Revision Date: 1993-04-24

New Jersey Right To Know Components

Zinc di(acetate)	CAS-No.:	5970-45-6	Revision Date: 1993-04-24

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Further information

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. ISOFLEX USA and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.isoflex.com for additional terms and conditions of sale.

Abbreviations and acronyms

RID	Règlement international concernerant le transport des marchandises par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO	International Civil Aviation Organization
ADR	Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG	International Maritime Code for Dangerous Goods
DOT	United States Department of Transportation
IATA	International Air Transport Association
ACGIH	American Conference of Governmental Industrial Hygienists
EINECS	European Inventory of Existing Commercial Chemical Substances
CAS	Chemical Abstracts Service (division of the American Chemical Society)
NFPA	National Fire Protection Association (USA)
HMIS	Hazardous Materials Identification System (USA)
LC50	Lethal concentration, 50 percent
LD50	Lethal dose, 50 percent