

Safety Data Sheet

Zinc Acetate, Dihydrate 27.5% Solution

MRD-219

*** Section 1 - Chemical Product and Company Identification ***

Product Identifier:

Zinc Acetate, Dihydrate 27.5% Solution

Chemical Name

Inorganic Salt Solution

Recommended Use

Various Industrial Applications

Manufacturer Information

MINERAL RESEARCH & DEVELOPMENT
5910 Pharr Mill Road
Harrisburg, NC 28075

Phone: 704-454-4811
FAX: 704-454-7390
CHEMTREC: (800) 424-9300
US and Canadian Shipping Only- 1-703-527-3887

General Comments

NOTE: Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

*** Section 2 - Hazard Identification ***

GHS Classification

Hazardous to Aquatic Life - Acute, Category 1
Hazardous to Aquatic Life - Chronic, Category 1
Eye damage/irritation, Category 2A
Acute toxicity - Oral, Category 4

GHS Label Elements

Symbol(s)



Signal Word -

Warning

Hazard Statements

Harmful if swallowed.
Causes serious eye irritation.
Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention

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Wash skin thoroughly after handling. Do not eat, drink, or smoke when using this product. Avoid release to the environment. Wear protective gloves/ eye/ face protection.

Response

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 ON SKIN (OR HAIR): Rinse skin with water/shower. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

IF INHALED: If inhaled, remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

Storage

Store locked up.

Disposal

Collect spillage. Dispose of contents/container in accordance with local/regional/national/international regulations.

*** Section 3 - Composition / Information on Ingredients ***

CAS #	Component	Percent
5970-45-6	Acetate, zinc, dihydrate	27.5
7732-18-5	Water	55-90

Component Information/Information on Non-Hazardous Components

This product has been evaluated using criteria specified in 29CFR 1910.1200 (Hazard Communication Standard) and the Canadian Controlled Product Regulations. This product is considered hazardous under the criteria specified in 29 CFR 1910.1200 (Hazard Communication Standard) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

*** Section 4 - First Aid Measures ***

Description of Necessary Measures

Eye Contact

IF IN EYES: Immediately flush eyes with large amounts of water, continuing to flush for 15 minutes. Have contaminated individual "roll" their eyes. If irritation persists get medical attention.

Skin Contact

IF ON SKIN (or hair): Immediately take off all contaminated clothing. For skin contact, flush with large amounts of water. If irritation persists, get medical attention.

Ingestion

IF SWALLOWED: Rinse mouth. Do not induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

Inhalation

IF INHALED: Move person to non-contaminated air. Call a physician if symptoms develop or persist.

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First Aid: Notes to Physician

Provide general supportive measures and treat symptomatically.

*** Section 5 - Fire Fighting Measures ***

General Fire Hazards

This product is an aqueous mixture, which will not burn.

Hazardous Combustion Products

Decomposition of this product may produce acrid vapors, zinc compounds, and oxides of carbon.

Extinguishing Media

Dry chemical, foam, carbon dioxide, water fog.

Fire Fighting Equipment/Instructions

Fire fighters should wear full-face, self-contained breathing apparatus and impervious protective clothing. Fire fighters should avoid inhaling any combustion products.

NFPA Ratings: Health: 1 Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe



*** Section 6 - Accidental Release Measures ***

Containment Procedures

Stop the flow of material, if this is without risk. Wear appropriate protective equipment and clothing during clean up. Contain the discharged material and dike the spilled material where possible. Prevent entry into sewers, drains, underground or confined spaces, water intakes and waterways. Avoid contact with combustible materials.

Clean-Up Procedures

Absorb spill with inert material. Shovel material into appropriate container for disposal. Decontaminate the area quickly.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

Isolate exposure. Wear appropriate personal protective equipment. Follow all Local, State, Federal and Provincial regulations for disposal.

*** Section 7 - Handling and Storage ***

Handling Procedures

Do not get this material in your eyes, on your skin, or on your clothing. Avoid breathing vapors or mists of this product. Wash thoroughly after handling. Do not eat, drink or use tobacco products when handling this material. Use this product with adequate ventilation. Launder work clothes frequently.

Open containers slowly, on a stable surface. Containers of this product must be properly labeled. Empty containers may contain residual liquid or vapors. Empty containers should be handled with care.

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Storage Procedures

Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Store away from incompatible materials. Material should be stored in secondary containers, or in a diked area, as appropriate. Keep container tightly closed when not in use. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged.

*** Section 8 - Exposure Controls / Personal Protection ***

Component Exposure Limits

ACGIH, OSHA, NIOSH or the provinces of Canada have not developed exposure limits for any of this product's components.

Engineering Controls

Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear safety glasses; chemical goggles (if splashing is possible).

Personal Protective Equipment: Skin

Use impervious gloves. Use of an impervious apron is recommended.

Personal Protective Equipment: Respiratory

If ventilation is not sufficient to effectively prevent buildup of large quantities of dust or prolonged exposure is possible, appropriate approved NIOSH respiratory protection must be provided. Respirators should be selected by and used under the direction of a trained health and safety professional following the requirements found in OSHA's respirator standard (29 CFR 1901.134) and ANSI's standard for respiratory protection (Z88.2-1992), applicable U.S. regulations, or the Canadian CSA Standard Z94.4-93 and applicable standards of Canadian Provinces. A written respiratory protection program, including provisions for medical certification, training, fit-testing, exposure assessments, maintenance, inspection, cleaning, and convenient, sanitary storage, must be implemented.

Personal Protective Equipment: General

Eye wash fountain and emergency showers are recommended.

*** Section 9 - Physical & Chemical Properties ***

Appearance:	Clear, colorless	Odor:	Slight vinegar odor
Physical State:	Liquid	Odor Threshold:	Not Applicable
Vapor Pressure:	Not available	pH:	5.0-5.5
Vapor Density:	Not available	Specific Gravity:	1.5 @ 15 °C (59 °F)
Boiling Point / Boiling Range:	Not available	Evaporation Rate:	Similar to Water
Melting Point / Freezing Point:	Not available	Relative Density:	Not available
Solubility (H₂O):	Soluble	Auto-ignition Temperature:	Not available
Flash Point:	Not Flammable	Decomposition Temperature:	Not available

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Upper Flammable Limit (UFL): Not Applicable
Viscosity: Not available
Flammability: Not available

Lower Flammable Limit (LFL): Not Applicable
Partition Coefficient (n-octanol / water): Not available

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability

Stable under normal conditions.

Chemical Stability: Conditions to Avoid

Avoid exposure to extreme temperatures and contact with incompatible chemicals.

Incompatibility

Strong oxidizing agents, strong acids, zinc salts, acacia, alkalis, and their carbonates, oxalates, phosphates, sulfides, lime water.

Hazardous Decomposition

Zinc compounds, carbon oxides

Hazardous Polymerization

Will not occur.

*** Section 11 - Toxicological Information ***

Acute Toxicity

This product is slightly irritating to eyes, skin, and mucous membranes.

Component Analysis - LD50/LC50

Water (7732-18-5)

Oral LD50 Rat: >90 mL/kg

Acetate, zinc, dihydrate (5970-45-6)

Oral LD50 Rat: 794 mg/kg

Information on Likely Routes of Exposure

Inhalation

No data available.

Ingestion

No data available.

Skin Contact

No data available.

Eye Contact

No data available.

Immediate Effects

No data available.

Delayed Effects

No data available.

Medical Conditions Aggravated by Exposure

No data Available.

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Irritation/Corrosivity Data

No data available.

Respiratory Sensitization

No data available.

Dermal Sensitization

No data available.

Germ Cell Mutagenicity

No data available for the mixture.

Carcinogenicity

Component Carcinogenicity

This product not listed as carcinogens by ACGIH, NIOSH, or IARC.

Reproductive Toxicity

No information available for the product.

Specific Target Organ Toxicity - Single Exposure

No information available for the product.

Specific Target Organ Toxicity - Repeated Exposure

No information available for this product.

Aspiration Hazard

No information available for the product.

*** Section 12 - Ecological Information ***

Ecotoxicity

A: General Product Information

This product may be harmful to terrestrial and aquatic plant or animal life, especially if released in large amounts.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

No ecotoxicity data are available for this product's components.

Environmental Fate

The components of this product are relatively stable under ambient, environmental conditions.

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

A: General Product Information

Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

B: Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

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*** Section 14 - Transportation Information ***

US DOT Information

Shipping Name: This product is not regulated as a hazardous material for transportation.

Canada Transportation of Dangerous Goods Information

Shipping Name: This product is not regulated as a hazardous material for transportation

International Maritime Dangerous Goods Information

Shipping Name: This product is not regulated as a hazardous material for transportation.

*** Section 15 - Regulatory Information ***

US Federal Regulations

Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Acetate, zinc, dihydrate (5970-45-6)

SARA 313: 1.0 % de minimis concentration (Chemical Category N982) (related to Zinc compounds)

SARA 311/312: **Acute Health:** Yes **Chronic Health:** No **Fire:** No **Pressure:** No **Reactive:** No

Federal Insecticide, Fungicide, and Rodenticide Act

No information is available.

State Regulations

A: General Product Information

Other state regulations may apply. Check individual state requirements.

B: Component Analysis - State

Component	CAS	CA	MA	MN	NJ	PA	RI
Acetate, zinc, dihydrate (related to Zinc compounds)	5970-45-6	Yes ¹	No	No	Yes ¹	Yes ¹	No

No components are listed on the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).

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Component Analysis - WHMIS IDL

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which fall under WHMIS criteria specified in the Controlled Products Regulations and present above the threshold limits listed on the IDL. None of the components are listed on the IDL.

WHMIS Classification

D2B

Additional Regulatory Information

A: General Product Information

Zinc Acetate Dihydrate is a hydrate of an anhydrous form which is on the TSCA Inventory and the DSL/NDSL Inventory.

B: Component Analysis - Inventory

Component	CAS #	TSCA	DSL	NDSL	EINECS	AU	MITI	PH	KR	ELINCS	CN
Water	7732-18-5	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No	Yes
Acetate, zinc, dihydrate	5970-45-6	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes

*** Section 16 - Other Information ***

Summary of Changes

New SDS: 12/05/2014 v1.0; Revised 05/04/2015 v1.3

Key / Legend

ACGIH = American Conference of Governmental Industrial Hygienists; **AU** = Australia; **BOD** - Biochemical Oxygen Demand; **C** - Celsius; **CA** - Canada; **CAS** = Chemical Abstracts Service; **CERCLA** = Comprehensive Environmental Response, Compensation, and Liability Act; **CFR** = Code of Federal Regulations; **CN** = China; **CPR** = Controlled Products Regulations; **DOT** = Department of Transportation; **DSL** = Domestic Substances List; **EINECS** = European Inventory of Existing Commercial Chemical Substances; **ELINCS** = European List of Notified Chemical Substances; **EmS** = Emergency Response Procedures for Ships Carrying Dangerous Goods; **EPA** = Environmental Protection Agency; **EU** = European Union; **F** - Fahrenheit; **HEPA** = High Efficiency Particulate Air; **HMIS** = Hazardous Material Information System; **HPV** - High Production Volume Chemical (EU); **IARC** = International Agency for Research on Cancer; **IATA** = International Air Transport Association; **ICL** - In Commerce List (Canada); **IDL** - Ingredient Disclosure List; **IDLH** - Immediately Dangerous to Life and Health; **JP** = Japan; **KR** = Korea; **LEL** - Lower Explosive Limit; **MITI** = Japan Ministry of International Trade and Industry; **mg/Kg** = milligrams per Kilogram; **mg/L** = milligrams per Liter; **mg/m³** = milligrams per Cubic Meter; **MSHA** = Mine Safety and Health Administration; **NA** = Not Applicable or Not Available; **NFPA** = National Fire Protection Association; **NIOSH** = National Institute for Occupational Safety and Health; **NJTSSR** = New Jersey Trade Secret Registry; **NDSL** = Non-Domestic Substances Inventory; **NTP** = National Toxicology Program; **NZ** = New Zealand; **OSHA** = Occupational Safety and Health Administration; **PH** = Philippines; **RCRA** = Resource Conservation & Recovery Act; **RQ** = Reportable Quantity; **SARA** = Superfund Amendments and Reauthorization Act; **STEL** = Short Term Exposure Limit; **TDG** = Transport Dangerous Goods; **TSCA** = Toxic Substances Control Act; **TWA** - Time Weighted Average; **UEL** - Upper Explosive Limit; **US** - United States; **WHMIS** = Workplace Hazardous Materials Information System.

Other Information

Disclaimer: Supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product

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purchased is sold on the assumption the purchaser will make his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the Safety Data Sheet before handling product.

End of Sheet MRD-219