

**Section 1: Identification of the Substance/Mixture and of the Company/Undertaking****Product Identifier:****Identification as on the label/Trade name:** Zinc Acetate Dihydrate (DZA).**Molecular weight:** 219.51**Chemical formula:**  $(\text{CH}_3\text{COO})_2\text{Zn} \cdot 2\text{H}_2\text{O}$  or  $\text{C}_4\text{H}_6\text{O}_4\text{Zn} \cdot 2\text{H}_2\text{O}$  or  $\text{C}_4\text{H}_{10}\text{O}_6\text{Zn}$ **Synonyms:** None.**Details of the supplier of the Safety Data Sheet:**

Neonest AB

Storgatan 70C, Solna

SE-17152

Sweden

**Contact details:**

+46-76-219-9731

**24-hour Emergency Contact:**

Swedish Poisons Centre

Phone: 112 - Ask for Poisons Information, 112 – begär Giftinformation.

**Other International Contacts:**

CHEMTREC 24-hour: +1-703-741-5500 (US + Worldwide)

NHS: 111 (UK)

Charite: +49 30 450 531 000 (Netherlands)

INTCF: +34 917689800 (Spain)

CapTv: +33 1 40 05 48 48 (France)

**Section 2: Hazards Identification****Classification of the substances or mixture:****The mixture is classified according to:** Regulation EC 1272/2008 [EU-GHS/CLP]**Hazard classes/Hazard categories:**

Acute Toxicity, Oral (Category 4)

Eye Damage (Category 1)

Aquatic Chronic (Category 2)

**Hazard statement:**

H302

H318

H411

**Label elements:****Hazard pictograms:****Signal Words:** Danger.

**Hazard Statements:**

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects.

**Precautionary Statements:**

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear eye protection/face protection.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P391 Collect spillage.

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

**Substance/Mixture:** Substance.

**Ingredients:**

Substance name (IUPAC/EC)	CAS-No.	Concentration % by weight	Classification	
	EC-No.		EC1272/2008	
Zinc di(acetate)	597-045-6	>99.9%	Acute Tox. 4	H302
	209-170-2		Eye Dam. 1	H318
			Aquatic Chronic 2H411	

For explanation of abbreviations see Section 16.

**Section 4: First-Aid Measures**
**Description of first aid measures:**

**Eyes:** Immediately wash out thoroughly with water or saline solution. Seek medical attention.

**Skin:** Remove contaminated clothing. Wash skin thoroughly with soap and water. Seek medical attention.

**Inhalation:** Remove from exposure and place in fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

**Ingestion:** Do not induce vomiting. If confined to the mouth area give large quantities of water as a mouthwash, ensure the water is not swallowed. If substance has been swallowed, give 500ml of water to dilute in stomach. Seek medical attention immediately.

**Most important symptoms and effects, both acute and delayed:**

None known.

**Indication of any immediate medical attention and special treatment needed:** Treat symptomatically.

## Section 5: Fire-Fighting Measures

### Extinguisher media:

**Suitable extinguisher media:** Use extinguishing media appropriate to the surrounding fire conditions (water, foam, CO<sub>2</sub>, or dry chemical).

**Special hazards arising from the mixture:** Emits toxic fumes under fire conditions.

**Advice for fire-fighters:** Wear Self-Contained Breathing Apparatus and protective clothing to prevent contact with skin and eyes.

## Section 6: Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures:

Wear appropriate protective clothing, to avoid contact with skin and eyes, and inhalation of dust.

**Environmental precautions:** Do not let this material enter the environment.

### Methods and materials for containment and cleaning up:

Clear up spillage, wash affected area with large quantities of water.

## Section 7: Handling and Storage

### Precautions for safe handling:

**Handling:** Do not breathe or ingest dust. Avoid any contact with skin and eyes. Occupational exposure limits for dust should be adhered to, this to include the use of local extraction systems.

### Conditions for safe storage, including any incompatibilities:

Keep cool and dry, in tightly closed container.

## Section 8: Exposure Controls/Personal Protection

### Control parameters:

**Occupational exposure limits:** Handle in accordance with good industrial hygiene and safety practice.

### Exposure controls:

**Appropriate engineering controls:** Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

### Individual protection measures, such as personal protective equipment:

**Respiratory protection:** Respirator must be worn if exposed to dust. Respirator with a dust filter.

**Hand protection:** Glove material: PVC or rubber gloves.

**Eye protection:** Tightly fitting safety goggles or face-shield.

**Skin and body protection:** Work clothing.

## Section 9: Physical and Chemical Properties

### Information on basic physical and chemical properties

**Appearance (form):** Solid (powder).

**Colour:** White.

**Odour:** Odourless.

**Odour threshold:** No data available.

**pH (concentration):** 6.0 - 8.0 at 50 g/l

**Melting point/range (°C):** 237 °C

**Boiling point/range (°C):** No data available.

**Flash point (°C):** No data available.

**Evaporation rate:** No data available.

**Flammability (solid, gas):** Non-flammable.

**Ignition temperature (°C):** No data available.

**Upper/lower flammability/explosive limits:** No data available.

**Vapour pressure (20 °C):** No data available.

**Vapour density:** No data available.

**Relative density (25 °C):** 1.840 g/cm<sup>3</sup>

**Water solubility (g/L) at 20 °C:** 434.78 g/L

**n-Octanol/Water partition coefficient:** No data available.

**Auto-ignition temperature:** No data available.

**Decomposition temperature:** No data available.

**Viscosity, dynamic (mPa s):** No data available.

**Explosive properties:** The substance or mixture is not classified as explosive.

**Oxidising properties:** The substance or mixture is not classified as oxidizing.

## Section 10: Stability and Reactivity

**Stability:** Stable under normal storage and temperature conditions.

**Conditions to avoid:** No data available.

**Incompatible materials:** Oxidizing agents.

**Hazardous decomposition products:** Hazardous decomposition products formed under fire conditions: Carbon oxides, zinc/zinc oxides.

**Thermal decomposition:** >237 °C

## Section 11: Toxicological Information

### Information on toxicological effects:

Harmful if swallowed.

### Classification according to GHS (1272/2008/EG, CLP)

#### **Skin corrosion/irritation:**

Not classified based on available information.

#### **Serious eye damage/eye irritation:**

Causes serious eye damage.

#### **Respiratory or skin sensitisation:**

Not classified based on available information.

**Germ cell mutagenicity:**

Not classified based on available information.

**Carcinogenicity:**

Not classified based on available information.

**Reproductive toxicity:**

Not classified based on available information.

**Specific target organ toxicity – single exposure (STOT):**

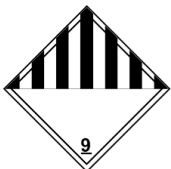
Not classified based on available information.

**Specific target organ toxicity (STOT) – repeated exposure:**

Not classified based on available information.

**Aspiration toxicity:**

Not classified based on available information.

**Section 12: Ecological Information****Toxicity:** Toxic to aquatic life with long lasting effects.**Persistence and degradability:** No data available.**Bioaccumulative potential:** No data available.**Mobility in soil:** No data available.**Results of PBT& vPvB assessment:** No data available.**Other adverse effects:** No data available.**Section 13: Disposal Considerations****Product:** Disposal should be in accordance with local or state or national legislation. Do not dispose of with oxidisers.**Contaminated packaging:** Disposal must be made according to official regulations. Dispose of contaminated packaging in the same manner as the product.**Section 14: Transport Information****UN number:** 3077**UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc acetate)**Transport hazard class:** Class 9**Transport hazard labels:****Packing group:** III**Marine pollutant:** Yes.

## Section 15: Regulatory Information

### EU regulations:

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

**Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

### Authorisations:

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

### Restrictions on use:

**Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use**

Not regulated.

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Not listed.

**Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work**

Not regulated.

**Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding.**

Not regulated.

### Other EU regulations:

**Directive 2012/18/EU on major accident hazards involving dangerous substances**

Not listed.

**Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.**

Always applicable.



## Safety Data Sheet for Depleted Zinc Acetate Dihydrate - Depleted in Zn-64 Isotope

According to ISO 11014:2010

First Print Date: 05-Mar-2015

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Version: 1.1.1.

### Directive 94/33/EC on the protection of young people at work

Not listed.

#### Additional Information:

**SARA 302 Components:** 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: Zinc di(acetate) / CAS No. 5970-45-6 / Revision Date 1993-04-24.

**SARA 311/312 Hazards:** Acute Health Hazard.

**Massachusetts Right to Know Components:** Zinc di(acetate) / CAS No. 5970-45-6 / Revision Date 1993-04-24.

**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 the State of California to cause cancer, birth defects, or any other reproductive harm.

**Chemical safety assessment:** No Chemical Safety Assessment has been carried out.

## Section 16: Other Information

#### List of abbreviations:

ACGIH American Conference of Governmental Industrial Hygienists  
ADR European Agreement Concerning the International Carriage of Dangerous Goods by Road  
ALARA As Low As Is Reasonably Achievable  
AMU Atomic Mass Unit  
ANSI American National Standards Institute  
BLS Basic Life Support  
CAM Continuous Air Monitor  
CAS Chemical Abstracts Service (division of the American Chemical Society)  
CEN European Committee for Standardization  
CERCLA Comprehensive Environmental Response Compensation and Liability Act  
CLP Classification, Labelling and Packaging (European Union)  
CPR Controlled Products Regulations (Canada)  
CWA Clean Water Act (USA)  
DAC Derived Air Concentration (USA)  
DOE United States Department of Energy (USA)  
DOT United States Department of Transportation (USA)  
DSL Domestic Substances List (Canada)  
EC50 Half Maximal Effective Concentration  
EINECS European Inventory of Existing Commercial Chemical Substances  
EHS Environmentally Hazardous Substance  
ELINCS European List of Notified Chemical Substances  
EMS Emergency Response Procedures for Ships Carrying Dangerous Goods  
EPA Environmental Protection Agency (USA)  
EPCRA Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986  
GHS Globally Harmonized System  
HMIS Hazardous Materials Identification System (USA)  
IARC International Agency for Research on Cancer  
IATA International Air Transport Association

IBC Intermediate Bulk Containers  
ICAO International Civil Aviation Organization  
IDLH Immediately Dangerous to Life or Health  
IMDG International Maritime Code for Dangerous Goods  
LC50 Lethal concentration, 50 percent  
LD50 Lethal dose, 50 percent  
LDLO Lethal Dose Low  
LOEC Lowest-Observed-Effective Concentration  
MARPOL International Convention for the Prevention of Pollution from Ships  
MSHA Mine Safety and Health Administration (USA)  
NCRP National Council on Radiation Protection & Measurements (USA)  
NDSL Non-Domestic Substances List (Canada)  
NFPA National Fire Protection Association (USA)  
NIOSH National Institute for Occupational Safety and Health (USA)  
NOEC No Observed Effect Concentration  
N.O.S. Not Otherwise Specified  
NRC Nuclear Regulatory Commission (USA)  
NTP National Toxicology Program (USA)  
OSHA Occupational Safety and Health Administration (USA)  
PBT Persistent Bioaccumulative and Toxic Chemical  
PEL Permissible Exposure Limit  
PIH Poisonous by Inhalation Hazard  
RCRA Resource Conservation and Recovery Act (USA)  
RCT Radiation Control Technician  
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (Europe)  
RID Regulations Concerning the International Transport of Dangerous Goods by Rail  
RTECS Registry of Toxic Effects of Chemical Substances  
SARA Superfund Amendments and Reauthorization Act (USA)  
TDG Transportation of Dangerous Goods (Canada)  
TIH Toxic by Inhalation Hazard  
TLV Threshold Limit Value  
TPQ Threshold Planning Quantity  
TSCA Toxic Substances Control Act  
TWA Time Weighted Average  
UN United Nations (Number)  
VOC Volatile Organic Compound  
vPvB Very Persistent Very Bioaccumulative Chemical  
WGK Wassergefährdungsklassen (Germany: Water Hazard Classes)  
WHMIS Workplace Hazardous Materials Information System

**References:**

Not available.

**Full text of any H-statements not written out in full under Sections 2 to 15:**

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects.

**Revision information:**

None.





**Safety Data Sheet for Depleted Zinc Acetate  
Dihydrate - Depleted in Zn-64 Isotope**

According to ISO 11014:2010

First Print Date: 05-Mar-2015

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Version: 1.1.1.

**Training information:**

Follow training instructions when handling this material.

**Further Information:**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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