

# SAFETY DATA SHEET

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## SECTION 1. IDENTIFICATION

**Product Identifier:** (4N) 99.99% Zinc Citrate Dihydrate

**Product Code:** ZN-CAT-04

**CAS Number:** 5990-32-9

**Relevant identified uses of the substance:** Scientific research and development

Supplier details:

American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351  
Emergency telephone number:  
+1 800-424-9300

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## SECTION 2. HAZARDS IDENTIFICATION

CLP Classification - Regulation (EC) No 1272/2008

Health hazards

Based on available data, the classification criteria are not met

Physical hazards

Based on available data, the classification criteria are not met

Environmental hazards

Based on available data, the classification criteria are not met

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## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component / CAS-No / Weight %

Zinc citrate / 5990-32-9 / <=100

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## SECTION 4. FIRST AID MEASURES

#### Description of first aid measures

##### Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

##### Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

##### Ingestion

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

##### Inhalation

Remove to fresh air. Get medical attention immediately if symptoms occur. Self-Protection of the First Aider No special precautions required.

Most important symptoms and effects, both acute and delayed

None reasonably foreseeable

##### Notes to Physician

Treat symptomatically.

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## SECTION 5. FIREFIGHTING MEASURES

#### Extinguishing media

##### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam.

Extinguishing media which must not be used for safety reasons

No information available.

##### Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

##### Hazardous Combustion Products

None under normal use conditions.

##### Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

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## SECTION 6. ACCIDENTAL RELEASE MEASURES

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

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

#### Environmental precautions

Should not be released into the environment. See Section 12 for additional Ecological Information.

#### Methods and material for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

#### Reference to other sections

Refer to protective measures listed in Sections 8 and 13

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## SECTION 7. HANDLING AND STORAGE

#### Precautions for safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Specific end use(s)

Use in laboratories

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC)

No information available.

Exposure controls

Engineering Measures

None under normal use conditions.

Personal protective equipment

Eye Protection Wear safety glasses with side shields (or goggles) (European standard - EN 166)

Hand Protection Protective gloves

Skin and body protection Long sleeved clothing

Inspect gloves before use. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger

of cuts, abrasion. Remove gloves with care avoiding skin contamination.

Respiratory Protection No protective equipment is needed under normal use conditions.

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced

Recommended Filter type: Particle filter 2

Small scale/Laboratory use Maintain adequate ventilation

Environmental exposure controls No information available.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Solid

Appearance White

Odor Odorless  
Odor Threshold No data available  
Melting Point/Range No data available  
Softening Point No data available  
Boiling Point/Range No information available  
Flammability (liquid) Not applicable Solid  
Flammability (solid,gas) No information available  
Explosion Limits No data available  
Flash Point No information available Method - No information available  
Autoignition Temperature No data available  
Decomposition Temperature No data available  
pH No information available  
Viscosity Not applicable Solid  
Water Solubility No information available  
Solubility in other solvents No information available  
Partition Coefficient (n-octanol/water)  
Vapor Pressure No data available  
Density / Specific Gravity No data available  
Bulk Density No data available  
Vapor Density Not applicable

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## **SECTION 10. STABILITY AND REACTIVITY**

Reactivity None known, based on information available  
Chemical stability  
Stable under normal conditions.  
Possibility of hazardous reactions  
Hazardous Polymerization No information available. Hazardous Reactions None under normal processing.  
Conditions to avoid  
Incompatible products. Excess heat.  
Incompatible materials  
None known.  
Hazardous decomposition products  
None under normal use conditions

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## **SECTION 11. TOXICOLOGICAL INFORMATION**

Product Information  
(a) acute toxicity;  
Oral No data available  
Dermal No data available  
Inhalation No data available  
(b) skin corrosion/irritation; No data available  
(c) serious eye damage/irritation; No data available  
(d) respiratory or skin sensitization;  
Respiratory No data available  
Skin No data available  
(e) germ cell mutagenicity; No data available  
(f) carcinogenicity; No data available  
There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available  
(h) STOT-single exposure; No data available  
(i) STOT-repeated exposure; No data available  
Target Organs No information available. (j) aspiration hazard; Not applicable  
Solid  
Symptoms / effects, both acute and delayed  
No information available.  
Information on other hazards  
Endocrine Disrupting Properties  
Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

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## SECTION 12. ECOLOGICAL INFORMATION

Toxicity  
Ecotoxicity effects Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.  
Persistence and degradability No information available  
Bioaccumulative potential No information available  
Mobility in soil No information available  
Results of PBT and vPvB assessment  
No data available for assessment.  
Endocrine disrupting properties  
Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors  
Other adverse effects  
Persistent Organic Pollutant This product does not contain any known or suspected substance  
Ozone Depletion Potential This product does not contain any known or suspected substance

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## SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods  
Waste from Residues/Unused Products  
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.  
Contaminated Packaging  
Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use empty containers.  
European Waste Catalogue (EWC) According to the European Waste Catalog, Waste Codes are not product specific, but application specific.  
Other Information Waste codes should be assigned by the user based on the application for which the product was used.

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## SECTION 14. TRANSPORT INFORMATION

MDG/IMO Not regulated  
UN number  
UN proper shipping name  
Transport hazard class(es)

Packing group  
ADR Not regulated  
UN number  
UN proper shipping name  
Transport hazard class(es)  
Packing group  
IATA Not regulated  
UN number  
UN proper shipping name  
Transport hazard class(es)  
Packing group  
Environmental hazards No hazards identified  
Special precautions for user No special precautions required  
Maritime transport in bulk according to IMO instruments  
Not applicable, packaged goods

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## SECTION 15. REGULATORY INFORMATION

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals  
Not applicable  
National Regulations  
WGK Classification Water endangering class = 3 (self classification)  
UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002

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## 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). 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. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.