

SAFETY DATA SHEET

Date Printed: 05/14/2024

Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifier: (4N) 99.99% Zirconium Propionate

Product Code: ZR-PROP-04

CAS Number: 84057-80-7

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

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS-US classification

Not classified

Label elements

GHS-US labeling

No labeling applicable

Other hazards

No additional information available

Unknown acute toxicity (GHS US)

No data available

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance type: Multi-constituent

Name: ZIRCONYL PROPIONATE

CAS No: 84057-80-7

EC no: 281-897-8

SECTION 4. FIRST AID MEASURES

First-aid measures general:

Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label.

First-aid measures If inhaled:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures In case of skin contact:

Wash with plenty of soap and water. Get medical advice/attention.

First-aid measures In case of eye contact:

Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion:

Never give anything by mouth to an unconscious person.

Get medical advice/attention.

Most important symptoms and effects, both acute and delayed

Symptoms/injuries If inhaled:

May cause irritation to the respiratory tract.

Symptoms/injuries In case of skin contact:

May cause skin irritation.

Symptoms/injuries In case of eye contact:

May cause eye irritation.

Symptoms/injuries after ingestion:

No data available.

Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media:

Water spray. Foam. Carbon dioxide. Dry chemical.

Unsuitable extinguishing media:

None known.

Special hazards arising from the substance or mixture

Fire hazard:

Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

Advice for firefighters

Firefighting instructions:

Exercise caution when fighting any chemical fire.

Use water spray to cool exposed surfaces.

Protection during firefighting:

Do not enter fire area without proper protective equipment, including respiratory protection. Avoid contact with skin and eyes. Do not breathe dust.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment:

Use personal protective equipment as described in Section 8.

Emergency procedures:

Evacuate unnecessary personnel.

For emergency responders

Protective equipment:

Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".

Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

Methods and material for containment and cleaning up

For containment:

Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for cleaning up:

Sweep or shovel spills into appropriate container for disposal.

Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

Precautions for safe handling:

Avoid contact with skin and eyes. Do not breathe dust. Avoid dust formation. Provide local exhaust or general room ventilation to minimize exposure to dust.

Hygiene measures:

Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Conditions for safe storage, including any incompatibilities conditions:

Keep container tightly closed.

Incompatible materials:

Water.

Storage area:

Store in a well-ventilated place. Store away from heat.

Specific end use(s)

No additional information available

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Zirconium propionate (84057-80-7)

USA OSHA

OSHA PEL (TWA) (mg/m³)

15 mg/m³ nuisance dust

Zirconyl dipropionate (Not found)

USA ACGIH

ACGIH TWA (mg/m³)

15 mg/m³ nuisance dust

Exposure controls

Appropriate engineering controls:

Provide local exhaust or general room ventilation.

Personal protective equipment:

Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Hand protection:

Neoprene or nitrile rubber gloves.

Eye protection:

Chemical goggles. Contact lenses should not be worn.

Skin and body protection:

Wear suitable protective clothing.

Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified dust and mist (teal cartridge) respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Solid

Appearance: Solid.

Molecular mass: 253.36 g/mol

Color: Off-white.

Odor: No data available

Odor threshold: No data available

Refractive index: No data available

pH: No data available

Relative evaporation rate (butyl acetate=1): No data available

Melting point: 160 °C decomposes

Freezing point: No data available

Boiling point: No data available

Flash point: > 110 °C

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Flammability (solid, gas): No data available

Vapor pressure: No data available

Relative vapor density at 20 °C: No data available

Relative density: No data available

VOC content: < 5 %

Solubility: Insoluble in water.

Organic solvent: Soluble: ethanol, ethyl acetate

Log Pow: No data available

Log Kow: No data available

Viscosity, Kinematic: No data available

Viscosity, Dynamic: No data available

Explosive properties: No data available

Oxidizing properties: No data available

Explosion limits: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity

No additional information available

Chemical stability

Stable.

Possibility of hazardous reactions

Material decomposes slowly in contact with water.

Conditions to avoid

Open flame. Heat. Sparks.

Incompatible materials

Water.

Hazardous decomposition products

Organic acid vapors. Zirconium oxide fumes

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity: Not classified

Skin corrosion/irritation: Not classified

Serious eye damage/irritation: Not classified

Respiratory or skin sensitization: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): Not classified

Specific target organ toxicity (repeated exposure): Not classified

Aspiration hazard: Not classified

Potential Adverse human health effects and symptoms:

Note: Material may form zirconium oxides or zirconate polymers on the skin, eyes or in the lungs. Prolonged exposure to zirconium compounds can induce formation of granulomatous lesions in the lungs or on the skin.

Symptoms/injuries If inhaled: May cause irritation to the respiratory tract.

Symptoms/injuries In case of skin contact: May cause skin irritation.

Symptoms/injuries In case of eye contact: May cause eye irritation.

Symptoms/injuries after ingestion: No data available.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

No additional information available

Persistence and degradability

No additional information available

Bioaccumulative potential

No additional information available

Mobility in soil

No additional information available

Other adverse effects

Effect on ozone layer:

No additional information available

Effect on the global warming:

No known ecological damage caused by this product.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Sewage disposal recommendations:

Do not dispose of waste into sewer.

Waste disposal recommendations:

Dispose in a safe manner in accordance with local/national regulations. Dispose of solid materials or residues at a licensed site.

Ecology -waste materials:

Avoid release to the environment.

SECTION 14. EXPOSURE CONTROLS/PERSONAL PROTECTION

UN number

Not regulated for transport.

UN proper shipping name

N/A

Additional information

Other information:

No supplementary information available.

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15. REGULATORY INFORMATION

US Federal regulations

Zirconium propionate (84057-80-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Zirconyl dipropionate (Not found)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

International regulations

Zirconium propionate (84057-80-7)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Canadian NDSL (Non-Domestic Substances List)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on Turkish inventory of chemical

Zirconyl dipropionate (Not found)

US State regulations

ZIRCONYL PROPIONATE

(84057-80-7)

U.S. -California -Proposition 65-Carcinogens List

No

U.S. -California -Proposition 65-Developmental Toxicity

No

U.S. -California -Proposition 65 -Reproductive Toxicity -Female

No

U.S. -California -Proposition 65 -Reproductive Toxicity -Male

No

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.