


[Zinc Silicate, Manganese-doped](#)

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<b>Linear Formula</b>	$\text{Zn}_2\text{SiO}_4:\text{Mn}^{2+}$
<b>Pubchem CID</b>	15763952
<b>MDL Number</b>	MFCD00049627
<b>EC No.</b>	271-896-0
<b>IUPAC Name</b>	dizinc; silicate
<b>SMILES</b>	<chem>[O-][Si]([O-])([O-])[O-].[Zn+2].[Zn+2]</chem>
<b>Inchl Identifier</b>	InChI=1S/O4Si.2Zn/c1-5(2,3)4;;/q-4;2*+2
<b>Inchl Key</b>	ZOIVSVWBENBHNT-UHFFFAOYSA-N
<b>Signal Word</b>	Warning
<b>Hazard Statements</b>	H315-H319-H332-H335
<b>Hazard Codes</b>	Xi
<b>Precautionary Statements</b>	P261-P305+P351+P338
<b>Risk Codes</b>	N/A
<b>Safety Statements</b>	S22
<b>Transport Information</b>	NONH for all modes of transport
<b>WGK Germany</b>	1
<b>GHS Pictograms</b>	<b><a href="#">GHS07</a></b> <b><a href="#">Exclamation Point</a></b> 

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## SAFETY DATA SHEET

Date Accessed: 04/20/2024

## SECTION 1. IDENTIFICATION

**Product Identifiers:** All applicable American Elements product codes for CAS #68611-47-2

**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:  
Domestic, North America +1 800-424-9300  
International +1 703-527-3887

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## SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview  
OSHA Hazards  
Irritant  
GHS Label elements, including precautionary statements



Signal word Warning  
Hazard statement(s)  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H335 May cause respiratory irritation.  
Precautionary statement(s)  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
HMIS Classification  
Health hazard: 2  
Flammability: 0  
Physical hazards: 0  
NFPA Rating  
Health hazard: 2  
Fire: 0  
Reactivity Hazard: 0

#### Potential Health Effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.

Skin May be harmful if absorbed through skin. Causes skin irritation.

Eyes Causes eye irritation.

Ingestion May be harmful if swallowed.

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### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms : Zinc silicate, manganese-doped

Formula :  $\text{Zn}_2\text{SiO}_4\text{:Mn}$

CAS: 68611-47-2

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### **SECTION 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.

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### **SECTION 5. FIREFIGHTING MEASURES**

#### Suitable extinguishing media

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

#### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

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### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

#### Personal precautions

Use personal protective equipment. Avoid dust

formation. Avoid breathing vapors, mist or gas.  
Ensure adequate  
ventilation. Evacuate personnel to safe areas. Avoid  
breathing dust.  
Environmental precautions  
Do not let product enter drains.  
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.

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## **SECTION 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. Normal measures for  
preventive fire protection.  
Conditions for safe storage  
Keep container tightly closed in a dry and well-  
ventilated place.  
Keep in a dry place.

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## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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  
Handle with gloves. Gloves must be inspected prior to  
use. Use proper glove removal technique (without  
touching  
glove's outer surface) to avoid skin contact with this  
product. Dispose of contaminated gloves after use in  
accordance with applicable laws and good laboratory  
practices. Wash and dry hands.  
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 the end of workday.

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## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance

Form powder

pH no data available

Melting point no data available

Boiling point no data available

Flash point not applicable

Ignition temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Water solubility no data available

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

Chemical stability

Stable under recommended storage conditions.

Conditions to avoid

no data available

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Zinc oxides, silicon oxides

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## **SECTION 11. TOXICOLOGICAL INFORMATION**

Acute toxicity

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

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

Specific target organ toxicity - single exposure  
(Globally Harmonized System)

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure  
(Globally Harmonized System)

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. Causes skin irritation.

Eyes Causes eye irritation.

Signs and Symptoms of Exposure

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

Additional Information

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## SECTION 12. ECOLOGICAL INFORMATION

Toxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

### Product

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

Dispose of as unused product.

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## **SECTION 14. TRANSPORT INFORMATION**

### DOT (US)

Not dangerous goods

### IMDG

Not dangerous goods

### IATA

Not dangerous goods

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## **SECTION 15. REGULATORY INFORMATION**

### OSHA Hazards

Irritant

### DSL Status

All components of this product are on the Canadian DSL list.

### 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

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold

(De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

Acute Health Hazard

### Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

### Pennsylvania Right To Know Components

Zinc silicate

CAS-No.

68611-47-2

Revision Date

### New Jersey Right To Know Components

Zinc silicate

CAS-No.  
68611-47-2  
Revision Date  
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.

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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.

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