

# SAFETY DATA SHEET

Date Accessed: 04/19/2024

Date Revised: 01/15/2022

## SECTION 1. IDENTIFICATION

**Product Name:** Barium Strontium Cobalt Ferrite

**Product Number:** All applicable American Elements product codes, e.g. BASRCO-FEIT-01-P

**CAS #:**

**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

Emergency Overview

OSHA Hazards

Target Organ Effect, Toxic by ingestion, Corrosive

Target Organs

Heart, Nerves., Kidney, Gastrointestinal tract, Bone marrow, Spleen., Liver

HMIS Classification

Health Hazard: 3

Chronic Health Hazard: \*

Flammability: 0

Physical hazards: 0

NFPA Rating

Health Hazard: 3

Fire: 0

Reactivity Hazard: 0



**Potential Health Effects**

Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Skin May be harmful if absorbed through skin. Causes skin burns.  
Eyes Causes eye burns.  
Ingestion Toxic if swallowed. Causes burns.

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

Barium Strontium Cobalt Ferrite Powder  
CAS: N/A

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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

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water.

Consult a physician.

In case of eye contact

Continue rinsing eyes during transport to hospital. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

Flammable properties

Flash point not applicable

Ignition temperature no data available

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 dust. Ensure adequate ventilation.

Evacuate personnel to safe areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods for cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

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## SECTION 7. HANDLING AND STORAGE

### Handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

### Storage

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

Keep in a dry place. Handle and store under inert gas. Air sensitive. Moisture sensitive.

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Value Control parameters Update Basis .

TWA 0.5 mg/m<sup>3</sup> 1993-06-30 US. Department of Labor -

Occupational Safety and Health

Administration (OSHA) Permissible

Exposure Limits (PEL) 29

CFR 1910.1000 Air Contaminants.

TWA 0.5 mg/m<sup>3</sup> 1989-03-01 US. Department of Labor -

Occupational Safety

and Health Administration (OSHA) 29

CFR 1910.1000 Z-1-A

TWA 0.5 mg/m<sup>3</sup> 1996-05-18 US. American Conference of

Governmental and Industrial

Hygienists Threshold Limit Values

for Chemical Substances in the Work

Environment; Annual Reports for the

Year 2004:Committees on Threshold

Limit Values (TLVs ) and Biological

Exposure Indices (BEIs)

### Remarks

The agent (mixture , or exposure circumstance) is not classifiable as to its carcinogenicity to humans .

1996 Adoption Refers to Appendix A -- Carcinogens.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form powder

### Safety data

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

Density no data available  
Water solubility no data available

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

Storage stability

Stable under recommended storage conditions.

Conditions to avoid

Avoid moisture.

Materials to avoid

acids, Acid chlorides, Acid anhydrides, Reducing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Barium oxide

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## **SECTION 11. TOXICOLOGICAL INFORMATION**

Acute toxicity

LD50 Intraperitoneal - mouse - 146 mg/kg

Irritation and corrosion

no data available

Sensitisation

no data available

Chronic exposure

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

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.

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.

Signs and Symptoms of Exposure

Cough, Shortness of breath, Headache, Nausea, Vomiting

Potential Health Effects

Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

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

Eyes Causes eye burns.

Ingestion Toxic if swallowed. Causes burns.

Target Organs Heart, Nerves., Kidney, Gastrointestinal tract, Bone marrow, Spleen., Liver,

Additional Information

RTECS: CQ9800000

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## **SECTION 12. ECOLOGICAL INFORMATION**

Elimination information (persistence and degradability)

no data available

Ecotoxicity effects

no data available

Further information on ecology

no data available

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

### Product

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

### Contaminated packaging

Dispose of as unused product.

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## **SECTION 14. TRANSPORT INFORMATION**

### DOT (US)

UN-Number: 1884 Class: 6.1 Packing group: III

Proper shipping name: Barium oxide

Marine pollutant: No

Poison Inhalation Hazard: No

### IMDG

UN-Number: 1884 Class: 6.1 Packing group: III EMS-No: F-A, S-A

Proper shipping name: BARIUM OXIDE

Marine pollutant: No

### IATA

UN-Number: 1884 Class: 6.1 Packing group: III

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## **SECTION 15. REGULATORY INFORMATION**

### OSHA Hazards

Target Organ Effect, Toxic by ingestion, Corrosive

### 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

Barium oxide, obtained by calcining witherite

CAS-No.

1304-28-5

Revision Date

1989-12-01

### SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

### Massachusetts Right To Know Components

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

### Pennsylvania Right To Know Components

Barium oxide, obtained by calcining witherite

CAS-No.

1304-28-5

Revision Date

1989-12-01

New Jersey Right To Know Components  
Barium oxide, obtained by calcining witherite  
CAS-No.  
1304-28-5

Revision Date  
1989-12-01

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

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## **SECTION 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.