

Strontium Balls	Pricing >
Strontium Band	Pricing >
Strontium Bars	Pricing >
Strontium Blocks	Pricing >
Strontium Chunk	Pricing >
Strontium Coil	Pricing >
Strontium Concentrate	Pricing >
Strontium Cubes	Pricing >
Strontium Cylinder	Pricing >
Strontium Dendritic Pieces	Pricing >
Strontium Disc	Pricing >
Strontium Flake	Pricing >
Strontium Flange	Pricing >
Strontium Foil	Pricing >
Strontium Granules	Pricing >
Strontium Ingot	Pricing >
Strontium Lump	Pricing >
Strontium Mesh	Pricing >
Strontium Metal	Pricing >
Strontium Microfoil	Pricing >
Strontium Microleaf	Pricing >
Strontium Nanoparticles	Pricing >
Strontium Nanoprisms	Pricing >
Strontium Parts	Pricing >
Strontium Pellets	Pricing >
Strontium Pieces	Pricing >
Strontium Plate	Pricing >
Strontium Powder	Pricing >
Strontium Puck	Pricing >
Strontium Ribbon	Pricing >

Strontium Rings	Pricing >
Strontium Rod	Pricing >
Strontium Rotatable Sputtering Target	Pricing >
Strontium Samples	Pricing >
Strontium Shavings	Pricing >
Strontium Sheet	Pricing >
Strontium Shot	Pricing >
Strontium Single Crystal	Pricing >
Strontium Sleeves	Pricing >
Strontium Slugs	Pricing >
Strontium Specimen	Pricing >
Strontium Spheres	Pricing >
Strontium Spring	Pricing >
Strontium Sputtering Target	Pricing >
Strontium Strip	Pricing >
Strontium Tape	Pricing >
Strontium Tube	Pricing >
Strontium Wafer	Pricing >
Strontium Wire	Pricing >
Ultra Thin Strontium Foil	Pricing >

Linear Formula	Sr
Pubchem CID	5359327
MDL Number	MFCD00134060
EC No.	231-133-4
Beilstein/Reaxys No.	N/A
SMILES	[Sr]
Inchl Identifier	InChI=1S/Sr
Inchi Key	CIOAGBVUUVVLOB-UHFFFAOYSA-N

Signal Word	Danger
<b>Hazard Statements</b>	H260-H315
Hazard Codes	F,Xi
Precautionary Statements	P223-P231 + P232-P370 + P378-P422
Flash Point	Not applicable
Risk Codes	N/A

Safety Statements	N/A
RTECS Number	N/A
Transport Information	UN 3208 4.3/PG 1
WGK Germany	3
GHS Pictograms	GHS07 Exclamation Point  ! GHS02 Flame

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### SAFETY DATA SHEET

**Date Accessed:** 04/18/2024 **Date Revised:** 01/15/2022

### **SECTION 1. IDENTIFICATION**

**Product Identifiers:** All applicable American Elements product codes for CAS #7440-24-6

### 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

### **SECTION 2. HAZARDS IDENTIFICATION**

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) GHS02 Flame

Water-react. 2 H261 In contact with water releases flammable gas.

Hazards not otherwise classified

No data available GHS label elements GHS label elements, including precautionary statements Hazard pictograms



GHS02

Signal word

Danger

Hazard statements

H261 In contact with water releases flammable gas.

Precautionary statements

P231+P232 Handle under inert gas. Protect from moisture.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P233 Keep container tightly closed.

P370+P378 In case of fire: Use for extinction: Special powder for metal fires.

P402+P404 Store in a dry place. Store in a closed container.

P501 Dispose of contents/container in accordance with local/regional/

national/international regulations.

WHMIS classification

B6 - Reactive flammable material

Classification system

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

**HEALTH** 

**FIRE** 

**REACTIVITY** 

1

3

2

Health (acute effects) = 1

Flammability = 3

Physical Hazard = 2

Other hazards

Results of PBT and vPvB assessment

PBT:

N/A

vPvB:

N/A

# SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

CAS No. / Substance Name:

7440-24-6 strontium Identification number(s): EC number: 231-133-4

#### **SECTION 4. FIRST AID MEASURES**

Description of first aid measures

If inhaled:

Supply patient with fresh air. If not breathing, provide artificial respiration. Keep patient warm.

Seek immediate medical advice.

In case of skin contact:

Immediately wash with soap and water; rinse thoroughly.

Seek immediate medical advice.

In case of eye contact:

Rinse opened eye for several minutes under running water. Consult a physician.

If swallowed:

Seek medical treatment.

Information for doctor

Most important symptoms and effects, both acute and delayed

No data available

Indication of any immediate medical attention and special treatment needed

No data available

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

Extinguishing media

Suitable extinguishing agents

Special powder for metal fires. Do not use water.

For safety reasons unsuitable extinguishing agents

Carbon dioxide

Water

Special hazards arising from the substance or mixture If this product is involved in a fire, the following can be released:

Metal oxide fume

Advice for firefighters

Protective equipment:

Wear self-contained respirator.

Wear fully protective impervious suit.

# SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and

emergency procedures

Use personal protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources

Environmental precautions:

Do not allow material to be released to the

environment without official permits.

Methods and materials for containment and cleanup:

Keep away from ignition sources.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

Prevention of secondary hazards:

Keep away from ignition sources.

Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### **SECTION 7. HANDLING AND STORAGE**

Handling

Precautions for safe handling

Handle under dry protective gas.

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Ensure good ventilation at the workplace.

Reacts violently with water

Information about protection against explosions and fires:

Protect against electrostatic charges.

Conditions for safe storage, including any

incompatibilities

Requirements to be met by storerooms and receptacles:

No special requirements.

Information about storage in one common storage facility:

Store away from air.

Store away from water/moisture.

Do not store together with acids.

Store away from oxidizing agents.

Further information about storage conditions:

Store under dry inert gas.

Keep container tightly sealed.

Store in cool, dry conditions in well-sealed containers.

Protect from humidity and water.

Specific end use(s)

No data available

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters

Components with limit values that require monitoring at the workplace:

None.

Additional information:

No data

Exposure controls

Personal protective equipment

Follow typical protective and hygienic practices for handling chemicals.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work. Maintain an ergonomically appropriate working environment.

Breathing equipment:

Use suitable respirator when high concentrations are present.

Recommended filter device for short term use: Use a respirator with type P100 (USA) or P3 (EN 143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if airpurifying respirators are appropriate. Only use equipment tested and approved under appropriate

Protection of hands:

government standards.

Impervious gloves

Inspect gloves prior to use.

Suitability of gloves should be determined both by material and quality, the latter of which may vary by manufacturer.

Penetration time of glove material (in minutes)

No data available

Eye protection:

Safety glasses

Full face protection

Body protection:

Protective work clothing

# SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties Appearance:

Form: Solid

Color: White to yellow to gold Odor: No data available

Odor threshold: No data available.

pH: N/A

Melting point/Melting range: 777 °C (1431 °F) Boiling point/Boiling range: 1382 °C (2520 °F) Sublimation temperature / start: No data available

Flammability (solid, gas)

Contact with water liberates extremely flammable

gases.

Ignition temperature: No data available

Decomposition temperature: No data available

Autoignition: No data available.

Danger of explosion: No data available.

**Explosion limits:** 

Lower: No data available Upper: No data available

Vapor pressure at 20 °C (68 °F): 0 hPa

Density at 20 °C (68 °F): 2.64 g/cm<sup>3</sup> (22.031 lbs/gal)

Relative density No data available. Vapor density

N/A

**Evaporation rate** 

N/A

Solubility in Water (H<sub>2</sub>O): Contact with water releases

flammable gases

Partition coefficient (n-octanol/water): No data

available.
Viscosity:
Dynamic: N/A
Kinematic: N/A
Other information
No data available

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

Reactivity

In contact with water releases flammable gases which may ignite spontaneously.

Chemical stability

Stable under recommended storage conditions.

Thermal decomposition / conditions to be avoided:

Decomposition will not occur if used and stored according to specifications.

Possibility of hazardous reactions

Reacts with strong oxidizing agents

Contact with water releases flammable gases

Conditions to avoid

No data available

Incompatible materials:

Acids

Air

Oxidizing agents

Water/moisture

Hazardous decomposition products:

Metal oxide fume

## SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for components in this product.

LD/LC50 values that are relevant for classification:

No data

Skin irritation or corrosion:

May cause irritation

Eye irritation or corrosion:

May cause irritation

Sensitization:

No sensitizing effects known.

Germ cell mutagenicity:

No effects known.

Carcinogenicity:

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP,

OSHA or ACGIH.

Reproductive toxicity:

No effects known.

Specific target organ system toxicity - repeated exposure:

No effects known.

Specific target organ system toxicity - single

exposure:

No effects known.

Aspiration hazard:

No effects known.

Subacute to chronic toxicity:

No effects known.

Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

### **SECTION 12. ECOLOGICAL INFORMATION**

**Toxicity** 

Aquatic toxicity:

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Additional ecological information:

Do not allow material to be released to the environment without official permits.

Do not allow undiluted product or large quantities to reach groundwater, water courses, or sewage systems.

Avoid transfer into the environment.

Results of PBT and vPvB assessment

PBT:

N/A

vPvB:

N/A

Other adverse effects

No data available

## SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Recommendation

Consult official regulations to ensure proper disposal.

Uncleaned packagings:

Recommendation:

Disposal must be made according to official regulations.

### **SECTION 14. TRANSPORT INFORMATION**

**UN-Number** 

DOT, IMDG, IATA

UN3208

UN proper shipping name

DOT

Metallic substance, water-reactive, n.o.s. (strontium)

IMDG, IATA

METALLIC SUBSTANCE, WATER-REACTIVE,

N.O.S. (strontium)

Transport hazard class(es)

DOT

Class

4.3 Substances which, in contact with water, emit flammable gases.

Label

4.3

Class

4.3 (W2) Substances which, in contact with water, emit flammable gases

Label

4.3

IMDG, IATA

Class

4.3 Substances which, in contact with water, emit flammable gases.

Label

4.3

Packing group

DOT, IMDG, IATA

Ш

Environmental hazards:

N/A

Special precautions for user

Warning: Substances which, in contact with water,

emit flammable gases EMS Number: F-G,S-N

Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code

N/A

Transport/Additional information:

DOT

Marine Pollutant (DOT):

No

UN "Model Regulation":

UN3208, Metallic substance, water-reactive, n.o.s. (strontium), 4.3, II

# **SECTION 15. REGULATORY INFORMATION**

Safety, health and environmental

regulations/legislation specific for the substance or mixture

GHS GHS label elements, including precautionary statements

Hazard pictograms

GHS02

Signal word

Danger

Hazard statements

H261 In contact with water releases flammable gas.

Precautionary statements

P231+P232 Handle under inert gas. Protect from moisture.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P233 Keep container tightly closed.

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P402+P404 Store in a dry place. Store in a closed container.

P501 Dispose of contents/container in accordance

with local/regional/national/international regulations. National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

All components of this product are listed on the Canadian Domestic Substances List (DSL).

SARA Section 313 (specific toxic chemical listings)

Substance is not listed.

California Proposition 65

Prop 65 - Chemicals known to cause cancer

Substance is not listed.

Prop 65 - Developmental toxicity

Substance is not listed.

Prop 65 - Developmental toxicity, female

Substance is not listed.

Prop 65 - Developmental toxicity, male

Substance is not listed.

Information about limitation of use:

For use only by technically qualified individuals.

Other regulations, limitations and prohibitive regulations

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006.

Substance is not listed.

The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.

Substance is not listed.

Annex XIV of the REACH Regulations (requiring

Authorisation for use)

Substance is not listed.

Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

### 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

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