

Scandium Balls	Pricing >
Scandium Band	Pricing >
Scandium Bars	Pricing >
Scandium Blocks	Pricing >
Scandium Chunk	Pricing >
Scandium Coil	Pricing >
Scandium Concentrate	Pricing >
Scandium Crucibles	Pricing >
Scandium Cubes	Pricing >
Scandium Cylinder	Pricing >
Scandium Dendritic Pieces	Pricing >
Scandium Disc	Pricing >
Scandium Flake	Pricing >
Scandium Flange	Pricing >
Scandium Foil	Pricing >
Scandium Granules	Pricing >
Scandium Ingot	Pricing >
Scandium Lump	Pricing >
Scandium Mesh	Pricing >
Scandium Metal	Pricing >
Scandium Microfoil	Pricing >
Scandium Microleaf	Pricing >
Scandium Nanoparticles	Pricing >
Scandium Nanoprisms	Pricing >
Scandium Nanorods	Pricing >
Scandium Particles	Pricing >
Scandium Parts	Pricing >
Scandium Pellets	Pricing >
Scandium Pieces	Pricing >
Scandium Plate	Pricing >

Scandium Powder	Pricing
Scandium Puck	Pricing
Scandium Ribbon	Pricing
Scandium Rings	Pricing
Scandium Rod	Pricing
Scandium Rotatable Sputtering Target	Pricing
Scandium Samples	Pricing
Scandium Shavings	Pricing
Scandium Sheet	Pricing
Scandium Shot	Pricing
Scandium Single Crystal	Pricing
Scandium Sleeves	Pricing
Scandium Slugs	Pricing
Scandium Specimen	Pricing
Scandium Spheres	Pricing
Scandium Spring	Pricing
Scandium Sputtering Target	Pricing
Scandium Strip	Pricing
Scandium Tape	Pricing
Scandium Tube	Pricing
Scandium Wafer	Pricing
Scandium Wire	Pricing
Ultra Thin Scandium Nanoscale Foil	Pricing

Linear Formula	Sc
Pubchem CID	23952
MDL Number	MFCD00016323
EC No.	231-129-2
Beilstein/Reaxys No.	N/A
SMILES	[Sc]
Inchl Identifier	InChI=1S/Sc
Inchl Key	SIXSYDAISGFNSX-UHFFFAOYSA-N

Signal Word	Danger
Hazard Statements	H228

Hazard Codes	F
Precautionary Statements	P210-P240-P241-P280-P370 + P378
Risk Codes	42135
Safety Statements	16-36/37/39-7/9
RTECS Number	N/A
Transport Information	UN 3089 4.1/PG 2
WGK Germany	nwg
GHS Pictograms	GHS02 Flame

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### **SAFETY DATA SHEET**

**Date Accessed:** 04/19/2024 **Date Revised:** 01/15/2022

### **SECTION 1. IDENTIFICATION**

**Product Identifiers:** All applicable American Elements product codes for CAS #7440-20-2

### 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

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

Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008

The substance is not classified as hazardous to health or the environment according to the CLP regulation.

Hazards not otherwise classified

No data available

Label elements

Labelling according to Regulation (EC) No 1272/2008

N/A

Hazard pictograms

N/A

Signal word

N/A

Hazard statements

N/A

WHMIS classification

Not controlled

Classification system

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

Health (acute effects) = 1

Flammability = 2

Physical Hazard = 1

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:

7440-20-2 Scandium

Identification number(s):

EC number: 231-129-2

### **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

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

Environmental precautions:

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

Methods and materials for containment and cleanup:

Pick up mechanically.

Prevention of secondary hazards:

No special measures required.

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.

Information about protection against explosions and fires:

No data available

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 halogens.

Store away from oxidizing agents.

Store away from air.

Store away from water/moisture.

Further information about storage conditions:

Store under dry inert gas.

This product is moisture sensitive.

This product is air sensitive.

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:

Not required.

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.

Protection of hands:

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.

Eye protection: Safety glasses

Body protection: Protective work clothing.

# SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance:

Form: Solid in various forms

Color: Silver grey Odor: Odorless

Odor threshold: No data available.

pH: N/A

Melting point/Melting range: 1539 °C (2802 °F) Boiling point/Boiling range: 2730 °C (4946 °F) Sublimation temperature / start: No data available

Flash point: N/A

Flammability (solid, gas): No data available. Ignition temperature: No data available Decomposition temperature: No data available

Autoignition: No data available.

Danger of explosion:

Product does not present an explosion hazard.

**Explosion limits:** 

Lower: No data available Upper: No data available Vapor pressure: N/A

Density at 20 °C (68 °F): 3 g/cm<sup>3</sup> (25.035 lbs/gal)

Relative density: No data available.

Vapor density: N/A Evaporation rate: N/A

Solubility in Water (H<sub>2</sub>O): No data available Partition coefficient (n-octanol/water): No data

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

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

Reactivity

No data available

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 No dangerous reactions known

Conditions to avoid

No data available

No data available

Incompatible materials:

Air

Oxidizing agents

Halogens

Water/moisture

Hazardous decomposition products:

Metal oxide fume

## SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects Acute toxicity: No effects known.

LD/LC50 values that are relevant for classification: No

data

Skin irritation or corrosion: Powder: irritant effect Eye irritation or corrosion: Powder: irritant effect

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.

Subacute to chronic toxicity:

Scandium has a low order of toxicity. As with calcium,

the toxicity is generally a function of the anion.

Additional toxicological information:

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

Carcinogenic categories

OSHA-Ca (Occupational Safety & Health

Administration)

Substance is not listed.

### **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**

Not a hazardous material for transportation.

**UN-Number** 

DOT, IMDG, IATA

None

UN proper shipping name

DOT, IMDG, IATA

None

Transport hazard class(es)

DOT, ADR, IMDG, IATA

Class

None

Packing group

DOT, IMDG, IATA

None

Environmental hazards:

N/A

Special precautions for user

N/A

Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code

N/A

Transport/Additional information:

Not dangerous according to

the above specifications.

DOT

Marine Pollutant (DOT):

No

# **SECTION 15. REGULATORY INFORMATION**

Safety, health and environmental

regulations/legislation specific for the substance or mixture

National regulations

All components of this product are listed in the U.S.

**Environmental Protection Agency Toxic Substances** 

Control Act Chemical substance Inventory.

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 MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.