

Rhodium Balls	Pricing >
Rhodium Band	Pricing >
Rhodium Bars	Pricing >
Rhodium Black	Pricing >
Rhodium Blocks	Pricing >
Rhodium Chunk	Pricing >
Rhodium Coil	Pricing >
Rhodium Concentrate	Pricing >
Rhodium Crucibles	Pricing >
Rhodium Cubes	Pricing >
Rhodium Cylinder	Pricing >
Rhodium Disc	Pricing >
Rhodium Flake	Pricing >
Rhodium Flange	Pricing >
Rhodium Foil	Pricing >
Rhodium Granules	Pricing >
Rhodium Ingot	Pricing >
Rhodium Lump	Pricing >
Rhodium Mesh	Pricing >
Rhodium Metal	Pricing >
Rhodium Microfoil	Pricing >
Rhodium Microleaf	Pricing >
Rhodium Nanoparticles / Nanopowder	Pricing >
Rhodium Nanorods	Pricing >
Rhodium Nanoscale Foil	Pricing >
Rhodium on Alumina	Pricing >
Rhodium on Barium Sulfate	Pricing >
Rhodium on Calcium Carbonate	Pricing >
Rhodium on Carbon	Pricing >

Rhodium on Silica	Pricing >
Rhodium Particles	Pricing >
Rhodium Parts	Pricing >
Rhodium Pellets	Pricing >
Rhodium Pieces	Pricing >
Rhodium Plate	Pricing >
Rhodium Powder	Pricing >
Rhodium Puck	Pricing >
Rhodium Ribbon	Pricing >
Rhodium Ring	Pricing >
Rhodium Rod	Pricing >
Rhodium Rotatable Sputtering Target	Pricing >
Rhodium Samples	Pricing >
Rhodium Shavings	Pricing >
Rhodium Sheet	Pricing >
Rhodium Shot	Pricing >
Rhodium Single Crystal	Pricing >
Rhodium Sleeves	Pricing >
Rhodium Slugs	Pricing >
Rhodium Specimen	Pricing >
Rhodium Spheres	Pricing >
Rhodium Sponge	Pricing >
Rhodium Spring	Pricing >
Rhodium Sputtering Target	Pricing >
Rhodium Strip	Pricing >
Rhodium Tape	Pricing >
Rhodium Tube	Pricing >
Rhodium Wafer	Pricing >
Rhodium Wedding Rings	Pricing >
Rhodium Wire	Pricing >
Linear Formula	Rh
Pubchem CID	23948
MDL Number	MFCD00011201
EC No.	231-125-0

Beilstein/Reaxys No.	N/A
SMILES	[Rh]
InchI Identifier	InChI=1S/Rh
InchI Key	MHOVAHRLVXNVSD-UHFFFAOYSA-N
Signal Word	N/A
Hazard Statements	N/A
Hazard Codes	N/A
Precautionary Statements	P210
Flash Point	Not applicable
Risk Codes	N/A
Safety Statements	N/A
RTECS Number	VI9069000
Transport Information	NONH
WGK Germany	nwg

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SAFETY DATA SHEET

Date Accessed: 04/25/2024

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SECTION 1. IDENTIFICATION

Product Identifiers: All applicable American Elements product codes for CAS #7440-16-6

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
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.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

N/A

Information concerning particular hazards for human and environment:

No data available

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) = 0

Flammability = 0

Physical Hazard = 0

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:

7440-16-6 Rhodium

Identification number(s):

EC number: 231-125-0

SECTION 4. FIRST AID MEASURES

Description of first aid measures

General information

No special measures required.

If inhaled:

Seek medical treatment in case of complaints.

In case of skin contact:

Generally the product does not irritate the skin.

In case of eye contact:
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
If swallowed:
If symptoms persist consult doctor.
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
Water
Special hazards arising from the substance or mixture
If this product is involved in a fire, the following can be released:
Rhodium oxide
Advice for firefighters
Protective equipment:
No special measures required.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Not required.
Environmental precautions:
Do not allow material to be released to the environment without official permits.
Do not allow product to enter drains, sewage systems, or other water courses.
Do not allow material to penetrate the ground or soil.
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

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Information about protection against explosions and fires:

No special measures required.

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:

No data available

Further information about storage conditions:

Keep container tightly sealed.

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

Specific end use(s)

No data available

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems:

No further data; see section 7.

Control parameters

Components with limit values that require monitoring at the workplace: 7440-16-6 Rhodium (100.0%)

PEL (USA) Long-term value: 0.1 mg/m³

REL (USA) Long-term value: 0.1 mg/m³ as Rh

TLV (USA) Long-term value: 1 mg/m³

EL (Canada) Short-term value: 0.3 mg/m³

Long-term value: 0.1 mg/m³ as Rh

EV (Canada) Long-term value: 1 * 0.01** mg/m³

*metal, water-insol. compds.; **water-soluble compds

Additional information: No data

Exposure controls

Personal protective equipment

Follow typical protective and hygienic practices for handling chemicals.

Maintain an ergonomically appropriate working environment.

Breathing equipment: Not required.

Protection of hands: Not required.

Penetration time of glove material (in minutes)

No data available
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: No data available

Odor: No data available

Odor threshold: No data available.

pH: N/A

Melting point/Melting range: 1966 °C (3571 °F)

Boiling point/Boiling range: 3695 °C (6683 °F)

Sublimation temperature / start: No data available

Flammability (solid, gas): No data available.

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): 12.41 g/cm³ (103.561 lbs/gal)

Relative density: No data available.

Vapor density: N/A

Evaporation rate: N/A

Solubility in Water (H₂O): No data available

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

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
Incompatible materials:
No data available
Hazardous decomposition products:
Rhodium oxide

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:
ACGIH A4: Not classifiable as a human carcinogen:
Inadequate data on which to classify the agent in terms of its carcinogenicity in humans and/or animals.
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, ADN, IMDG, IATA
N/A
UN proper shipping name
DOT, ADN, IMDG, IATA
N/A
Transport hazard class(es)
DOT, ADR, ADN, IMDG, IATA
Class
N/A
Packing group
DOT, IMDG, IATA
N/A
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:
DOT
Marine Pollutant (DOT):
No
UN "Model Regulation":

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.

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.

REACH - Pre-registered substances

Substance is 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

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