

Black Tungsten Wire	Pricing >
Chromium Plated Tungsten Rods	Pricing >
Chromium-coated Tungsten Wire	Pricing >
Gold-coated Tungsten Wire	Pricing >
Platinum-coated Tungsten Wire	Pricing >
Potassium-doped Tungsten Wire	Pricing >
Tungsten Balance Weights	Pricing >
Tungsten Ball	Pricing >
Tungsten Band	Pricing >
Tungsten Bars	Pricing >
Tungsten Blocks	Pricing >
Tungsten Boats	Pricing >
Tungsten Boring Bars	Pricing >
Tungsten Chunk	Pricing >
Tungsten Coil	Pricing >
Tungsten Collimator Plates	Pricing >
Tungsten Concentrate	Pricing >
Tungsten Conductor Paste	Pricing >
Tungsten Crucibles	Pricing >
Tungsten Cubes	Pricing >
Tungsten Cylinder	Pricing >
Tungsten Disc	Pricing >
Tungsten Electrodes	Pricing >
Tungsten Filaments	Pricing >
Tungsten Flange	Pricing >
Tungsten Foam	Pricing >
Tungsten Foil	Pricing >
Tungsten Furnace Elements	Pricing >
Tungsten Gauze	Pricing >
Tungsten Gauze, Gold Plated	Pricing >

Tungsten Granules	Pricing >
Tungsten Grids	Pricing >
Tungsten Heat Shields	Pricing >
Tungsten Honeycomb	Pricing >
Tungsten Ingot	Pricing >
Tungsten Insulated Wire	Pricing >
Tungsten Lump	Pricing >
Tungsten Mesh	Pricing >
Tungsten Metal	Pricing >
Tungsten Nanoparticle Dispersion	Pricing >
Tungsten Nanoparticles	Pricing >
Tungsten Nanorods	Pricing >
Tungsten Needles	Pricing >
Tungsten Particles	Pricing >
Tungsten Parts	Pricing >
Tungsten Pellets	Pricing >
Tungsten Pieces	Pricing >
Tungsten Pins	Pricing >
Tungsten Plate	Pricing >
Tungsten Platens	Pricing >
Tungsten Powder	Pricing >
Tungsten Puck	Pricing >
Tungsten Ribbon	Pricing >
Tungsten Ring	Pricing >
Tungsten Rod	Pricing >
Tungsten Rotatable Sputtering Target	Pricing >
Tungsten Samples	Pricing >
Tungsten Shavings	Pricing >
Tungsten Sheet	Pricing >
Tungsten Shot	Pricing >
Tungsten Single Crystal	Pricing >
Tungsten Sleeves	Pricing >
Tungsten Slugs	Pricing >
Tungsten Specimen	Pricing >

Tungsten Spheres	Pricing >
Tungsten Sponge	Pricing >
Tungsten Spring	Pricing >
Tungsten Sputtering Target	Pricing >
Tungsten Squares	Pricing >
Tungsten Strands	Pricing >
Tungsten Strip	Pricing >
Tungsten Syringe Shields	Pricing >
Tungsten Tape	Pricing >
Tungsten Tube	Pricing >
Tungsten Wafer	Pricing >
Tungsten Washer	Pricing >
Tungsten Wire	Pricing >
Tungsten Wire Baskets	Pricing >
Tungsten Wool	Pricing >
Tungsten X-Ray Shields	Pricing >

Linear Formula	W
Pubchem CID	23964
MDL Number	MFCD00011461
EC No.	231-143-9
Beilstein/Reaxys No.	N/A
SMILES	[W]
Inchi Identifier	InChI=1S/W
Inchi Key	WFKWXMUELFFGS-UHFFFAOYSA-N

Signal Word	Danger
Hazard Statements	H228-H315-H319
Hazard Codes	N/A
Precautionary Statements	P210-P305 + P351 + P338
Flash Point	Not applicable
Risk Codes	N/A
Safety Statements	N/A
RTECS Number	YO7175000
Transport Information	NONH

WGK Germany	nwg
GHS Pictograms	GHS07 Exclamation Point  GHS02 Flame 

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SAFETY DATA SHEET

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SECTION 1. IDENTIFICATION

Product Identifiers: All applicable American Elements product codes for CAS #7440-33-7

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
FIRE
REACTIVITY
0
0
0
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:
7440-33-7 Tungsten
Identification number(s):
EC number:
231-143-9

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:
Metal oxide fume
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:

Do not store together with acids.

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:

7440-33-7 Tungsten (100.0%)

PEL (USA) and insoluble compounds, as We

REL (USA) Short-term value: 10 mg/m³

Long-term value: 5 mg/m³
as W

TLV (USA) Short-term value: 10 mg/m³

Long-term value: 5 mg/m³
as W

EL (Canada) Short-term value: 10 mg/m³

Long-term value: 5 mg/m³
as W

EV (Canada) Short-term value: 10* 3** mg/m³

Long-term value: 5* 1** mg/m³
(as tungsten; compds.:*water-insol.;**water-sol.

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: Silver grey

Odor: No data available

Odor threshold: No data available.

pH: N/A

Melting point/Melting range: 3410 °C (6170 °F)

Boiling point/Boiling range: 5900 °C (10652 °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: N/A

Density at 20 °C (68 °F): 19.3 g/cm³ (161.059 lbs/gal)

Bulk density at 20 °C (68 °F): 4000 kg/m³

Relative density

No data available.

Vapor density

N/A

Evaporation rate

N/A

Solubility in Water (H₂O): Insoluble

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:
Acids
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:
No irritant effect.
Eye irritation or corrosion:
No 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:
The Registry of Toxic Effects of Chemical Substances (RTECS) contains reproductive data for this substance.
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

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
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