



(7N5) 99.999995% Arsenic Metal	Pricing >
Arsenic Balls	Pricing >
Arsenic Band	Pricing >
Arsenic Bars	Pricing >
Arsenic Chunk	Pricing >
Arsenic Coil	Pricing >
Arsenic Concentrate	Pricing >
Arsenic Cylinder	Pricing >
Arsenic Disc	Pricing >
Arsenic Flake	Pricing >
Arsenic Flange	Pricing >
Arsenic Foil	Pricing >
Arsenic Granules	Pricing >
Arsenic Ingots	Pricing >
Arsenic Lump	Pricing >
Arsenic Mesh	Pricing >
Arsenic Metal	Pricing >
Arsenic Microfoil	Pricing >
Arsenic Microleaf	Pricing >
Arsenic Nanoprisms	Pricing >
Arsenic Nanorods	Pricing >
Arsenic Parts	Pricing >
Arsenic Pellets	Pricing >
Arsenic Pieces	Pricing >
Arsenic Plate	Pricing >
Arsenic Powder	Pricing >
Arsenic Puck	Pricing >
Arsenic Ring	Pricing >
Arsenic Rod	Pricing >
Arsenic Rotatable Sputtering Target	Pricing >

Arsenic Samples	Pricing >
Arsenic Shavings	Pricing >
Arsenic Sheet	Pricing >
Arsenic Shot	Pricing >
Arsenic Single Crystal	Pricing >
Arsenic Sleeves	Pricing >
Arsenic Slugs	Pricing >
Arsenic Specimen	Pricing >
Arsenic Sphere	Pricing >
Arsenic Sponges	Pricing >
Arsenic Spring	Pricing >
Arsenic Sputtering Target	Pricing >
Arsenic Strip	Pricing >
Arsenic Tape	Pricing >
Arsenic Tube	Pricing >
Arsenic Wafer	Pricing >
Arsenic Wire	Pricing >
Black Arsenic Crystal	Pricing >
Ultra Thin Arsenic Nanoscale Foil	Pricing >

Linear Formula	As
Pubchem CID	5359596
MDL Number	MFCD00085309
EC No.	231-148-6
Beilstein/Reaxys No.	N/A
SMILES	[As]
Inchl Identifier	InChI=1S/As
Inchl Key	RQNWIZPPADIBDY-UHFFFAOYSA-N
Signal Word	Danger
Hazard Statements	H301 + H331-H410
Hazard Codes	N/A
Precautionary Statements	P261-P273-P301 + P310-P311-P501
Flash Point	Not applicable
Risk Codes	N/A
Safety Statements	N/A

RTECS Number	CG0525000
Transport Information	UN 1558 6.1 / PGII
WGK Germany	3
GHS Pictograms	<p><u>GHS09 Environment</u></p>  <p><u>GHS06 Skull and Crossbones</u></p> 

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SAFETY DATA SHEET

Date Accessed: 03/28/2024

Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifiers: All applicable American Elements product codes for CAS #7440-38-2

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
GHS06 Skull and crossbones
Acute Tox. 3 H301 Toxic if swallowed.
Acute Tox. 3 H331 Toxic if inhaled.

Hazards not otherwise classified

No data available

Label elements

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labeled according to the CLP regulation.

Hazard pictograms



Signal word

Danger

Hazard statements

H301+H331 Toxic if swallowed or if inhaled.

Precautionary statements

P261 Avoid breathing

dust/fume/gas/mist/vapors/spray.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P321 Specific treatment (see on this label).

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

WHMIS classification

D1A - Very toxic material causing immediate and serious toxic effects

D2A - Very toxic material causing other toxic effects

Classification system

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

HEALTH

FIRE

REACTIVITY

3

1

1

Health (acute effects) = 3

Flammability = 1

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:

7440-38-2 Arsenic

Identification number(s):

EC number:

231-148-6

Index number:

033-001-00-X

SECTION 4. FIRST AID MEASURES

Description of first aid measures

General information

Immediately remove any clothing soiled by the product.

Remove breathing apparatus only after contaminated clothing has been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

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:

Do not induce vomiting; immediately call for medical help.

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

Product is not flammable. Use fire-fighting measures that suit the surrounding fire.

Special hazards arising from the substance or mixture

If this product is involved in a fire, the following can be

released:
Arsenic oxides (AS₂O_x)
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 product to enter drains, sewage systems, or other water courses.
Methods and materials for containment and cleanup:
Dispose of contaminated material as waste according to section 13.
Ensure adequate ventilation.
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.
Ensure good ventilation at the workplace.
Open and handle container with care.
Information about protection against explosions and fires:
The product is not flammable
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.
Store away from oxidizing agents.
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:

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:

7440-38-2 Arsenic (100.0%)

PEL (USA) Long-term value: 0.5* 0.01** mg/m³
as As; *organic**inorg. compds.; 29 CFR 1910.1018

REL (USA) Ceiling limit value: 0.002 mg/m³
as As; 15min; See Pocket Guide App. A

TLV (USA) Long-term value: 0.01 mg/m³
as As; BEI

EL (Canada) Long-term value: 0.01 mg/m³
as As; ACIGH A1, IARC1

EV (Canada) Short-term value: 0.05 mg/m³

Long-term value: 0.01 mg/m³
as As

Ingredients with biological limit values:

7440-38-2 Arsenic (100.0%)

BEI (USA) 35 µg As/L

Medium: urine

Time: end of workweek

Parameter: Inorganic arsenic plus methylated metabolites (background)

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.

Store protective clothing separately.

Maintain an ergonomically appropriate working environment.

Breathing equipment:

Use self-contained respiratory protective device in

emergency situations.

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 air-

purifying respirators are appropriate. Only use

equipment tested and approved under appropriate

government standards.

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.

Material of gloves

Nitrile rubber, NBR

Penetration time of glove material (in minutes)

480

Glove thickness

0.11 mm

Eye protection:

Safety glasses

Body protection:

Protective work clothing

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance:

Form: Various forms (powder/flake/crystalline/beads, etc.)

Color: Grey

Odor: Odorless

Odor threshold: No data available.

pH: N/A

Melting point/Melting range: 817 °C (1503 °F)

Boiling point/Boiling range: 614 °C (1137 °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 267 °C (513 °F): 0.01 hPa

Density at 20 °C (68 °F): 5.778 g/cm³ (48.217 lbs/gal)

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
Reacts with strong oxidizing agents
Conditions to avoid
No data available
Incompatible materials:
Acids
Oxidizing agents
Hazardous decomposition products:
Arsenic oxides (As₂O_x)

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects
Acute toxicity:
Toxic if inhaled.
Toxic if swallowed.
The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for this substance.
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:
The Registry of Toxic Effects of Chemical Substances

(RTECS) contains mutation data for this substance.

Carcinogenicity:

EPA-A: human carcinogen: sufficient evidence from epidemiologic studies to support a causal association between exposure and cancer.

IARC-1: Carcinogenic to humans: sufficient evidence of carcinogenicity.

ACGIH A1: Confirmed human carcinogen: Agent is carcinogenic to humans based on epidemiologic studies of, or convincing clinical evidence in, exposed humans.

Carcinogen as defined by OSHA.

NTP-K: Known to be carcinogenic: sufficient evidence from human studies.

The Registry of Toxic Effects of Chemical Substances (RTECS) contains tumorigenic and/or carcinogenic and/or neoplastic data for this substance.

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:

The Registry of Toxic Effects of Chemical Substances (RTECS) contains multiple dose toxicity data for this substance.

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 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

Ecotoxicological effects:

Remark:

Very toxic for aquatic organisms

Additional ecological information:

Do not allow product to reach groundwater, water courses, or sewage systems, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

May cause long lasting harmful effects to aquatic life.

Avoid transfer into the environment.

Very toxic for aquatic organisms

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

UN1558

UN proper shipping name

DOT

Arsenic

IMDG, IATA

ARSENIC

Transport hazard class(es)

DOT

Class

6.1 Toxic substances.

Label

6.1

Class

6.1 (T5) Toxic substances

Label

6.1

IMDG, IATA

Class
6.1 Toxic substances.
Label
6.1
Packing group
DOT, IMDG, IATA
II
Environmental hazards:
Environmentally hazardous substance, solid; Marine
Pollutant
Special precautions for user
Warning: Toxic substances
EMS Number: F-A,S-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":
UN1558, Arsenic, 6.1, II

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)
7440-38-2 Arsenic
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.
