

Bismuth Antimony Telluride Beads	Pricing >
Bismuth Antimony Telluride Granule	Pricing >
Bismuth Antimony Telluride Lump	Pricing >
Bismuth Antimony Telluride Powder	Pricing >
Bismuth Antimony Telluride Sputtering Target	Pricing >

Linear Formula	BiSb ₃ Te ₆
Pubchem CID	117065228
MDL Number	MFCD22200524
EC No.	N/A
IUPAC Name	antimony; bismuth; tellurium
Beilstein/Reaxys No.	N/A
SMILES	[Sb].[Sb].[Sb].[Te].[Te].[Te].[Te].[Te].[Te].[Bi]
Inchl Identifier	InChI=1S/Bi.3Sb.6Te
Inchl Key	BOOKHSKFBCVCND-UHFFFAOYSA-N
Signal Word	N/A
Hazard Statements	N/A
Hazard Codes	N/A
Risk Codes	N/A
Safety Statements	N/A
Transport Information	NONH for all modes of transport
WGK Germany	3

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SAFETY DATA SHEET

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SECTION 1. IDENTIFICATION

Product Identifiers: All applicable American Elements product codes for CAS #31501-07-2

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
Not a hazardous substance or mixture.
GHS Label elements, including precautionary
statements
Not a hazardous substance or mixture.
Hazards not otherwise classified (HNOC) or not
covered by GHS - none

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances
Synonyms: Antimony bismuth telluride
Formula: Bi/Sb/Te
CAS-No.: 31501-07-2
No components need to be disclosed according to the
applicable regulations.

SECTION 4. FIRST AID MEASURES

Description of first aid measures
If inhaled
If breathed in, move person into fresh air. If not
breathing, give artificial respiration.
In case of skin contact
Wash off with soap and plenty of water.
In case of eye contact
Flush eyes with water as a precaution.
If swallowed
Never give anything by mouth to an unconscious
person. Rinse mouth with water.
Most important symptoms and effects, both acute and
delayed
The most important known symptoms and effects are
described in the labelling (see section 2.2)and/or in
section 11
Indication of any immediate medical attention and

special treatment needed
no data available

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture
no data available
Advice for firefighters
Wear self contained breathing apparatus for fire fighting if necessary.
Further information
no data available

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Avoid dust formation. Avoid breathing Vapors, mist or gas.
For personal protection see section 8.
Environmental precautions
Do not let product enter drains.
Methods and materials for containment and cleaning up
Sweep up and shovel. Keep in suitable, closed containers for disposal.
Reference to other sections
For disposal see section 13.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.
Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.
Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Form: Beads, powder, or solid in various forms

Odor

no data available

Odor Threshold

no data available

pH

no data available

Melting point/freezing point

no data available

Initial boiling point and boiling range
no data available
Flash point
no data available
Evaporation rate
no data available
Flammability (solid, gas)
no data available
Upper/lower flammability or explosive limits
no data available
Vapor pressure
no data available
Vapor density
no data available
Relative density
no data available
Water solubility
no data available
Partition coefficient: n-octanol/water
no data available
Auto-ignition temperature
no data available
Decomposition temperature
no data available
Viscosity
no data available
Explosive properties
no data available
Oxidizing properties
no data available
Other safety information
no data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity
no data available
Chemical stability
Stable under recommended storage conditions.
Possibility of hazardous reactions
no data available
Conditions to avoid
no data available
Incompatible materials
Acids
Hazardous decomposition products
Other decomposition products - no data available
Hazardous decomposition products formed under fire
conditions. - Bismuth oxides, Tellurium oxides,
Antimony oxide
In the event of fire: see section 5

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

no data available

Inhalation:

no data available

Dermal:

no data available

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

IARC:

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH:

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP:

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA:

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

RTECS:

Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical

safety assessment not required/not conducted

Other adverse effects

no data available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a
licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

Not a hazardous material for transportation.

DOT regulations:

Hazard class: None

Land transport ADR/RID (cross-border)

ADR/RID class: None

Maritime transport IMDG:

IMDG Class: None

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: None

Transport/Additional information:

Not dangerous according to the above specifications.

SECTION 15. REGULATORY INFORMATION

Product related hazard informations:

Hazard symbols:

Xi Irritant

Risk phrases:

36/37/38 Irritating to eyes, respiratory system and

skin.

Safety phrases:

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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 Non-Domestic

Substances List (NDSL).

Information about limitation of use:

For use only by technically qualified individuals.

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.
