

SAFETY DATA SHEET

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SECTION 1. IDENTIFICATION

Product Identifier: (5N) 99.999% Arsenic Bromide

Product Code: AS-BR-05

CAS Number: 7784-33-0

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:
+1 800-424-9300

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.

GHS09 environment

Aquatic Acute 1

H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

Other hazards that do not result in classification

No data available

Label elements

Labelling according to Regulation (EC) No 1272/2008

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

Hazard pictograms



GHS06 GHS09

Signal word

Danger

Hazard statements

H301 Toxic if swallowed.

H331 Toxic if inhaled.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P261

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

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor/...

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P311

Call a POISON CENTER/doctor/...

P405

Store locked up.

P501

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

Other hazards

Results of PBT and vPvB assessment

PBT:

N/A

vPvB:

N/A

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

CAS# Designation:

7784-33-0 Arsenic (III) bromide

Identification number(s):

EC number: 232-057-4

Index number: 033-002-00-5

SECTION 4. FIRST AID MEASURES

Description of first aid measures

General information

Instantly remove any clothing soiled by the product.

Remove breathing apparatus only after soiled 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. Consult doctor if symptoms persist.

Seek immediate medical advice.

In case of skin contact:

Instantly wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

In case of eye contact:

Rinse opened eye for several minutes under running water. Then consult doctor.

If swallowed:

Do not induce vomiting; instantly call for medical help.
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.
5.2 Special hazards arising from the substance or mixture
If this product is involved in a fire, the following can be released:
Hydrogen bromide (HBr)
Toxic metal compounds
Advice for firefighters
Protective equipment:
Wear self-contained breathing apparatus.
Wear full protective 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:
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 information on disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling
Keep containers tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation/exhaustion 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 containers:
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.

Store in a locked cabinet or with access restricted to technical experts or their assistants.

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 critical values that require monitoring at the workplace:

Arsenic, elemental, and inorganic
compounds (except arsine), as As
mg/m³

ACGIH TLV 0.01; Confirmed human carcinogen

Belgium TWA 0.2

Denmark TWA 0.05

Finland TWA Carcinogen

France VME 0.2

Hungary 0.5-STEL; Carcinogen

Korea TWA 0.01; Confirmed human carcinogen

Norway 0.02

Poland TWA 0.01

Sweden NGV 0.03; Carcinogen

Switzerland TWA 0.1; Carcinogen

United Kingdom TWA 0.1; Carcinogen

USA PEL 0.01

Additional information:

No data

Exposure controls

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures should be adhered to in handling the chemicals.

Keep away from foodstuffs, beverages and food. Instantly remove any soiled and impregnated garments.

Wash hands during breaks and at the end of the work.

Store protective clothing separately.

Maintain an ergonomically appropriate working environment.

Breathing equipment:

Use self-contained respiratory protective device in emergency situations.

Protection of hands:

Inspect gloves prior to use.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Material of gloves

Impervious gloves

Eye protection:

Safety glasses

Body protection:

Protective work clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance:

Form: Crystalline Powder

Colour: Yellowish

Smell: Acrid

Odor threshold: No data available.

pH: N/A

Melting point/Melting range: 32.8 °C

Boiling point/Boiling range: 221 °C

Sublimation temperature / start: No data available

Flash point: N/A

Inflammability (solid, gas)

No data available.

Ignition temperature: No data available

Decomposition temperature: No data available

Self-inflammability: No data available.

Danger of explosion: Product is not explosive.

Critical values for explosion:

Lower: No data available

Upper: No data available

Steam pressure at 41 °C: 1.33 hPa

Density at 20 °C

3.54 g/cm³

Relative density

No data available.

Vapor density

N/A

Evaporation rate

N/A

Solubility in Water (H₂O): Reacts

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:

No decomposition 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:
Toxic metal compounds
Hydrogen bromide

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity:

Toxic if inhaled.

Toxic if swallowed.

LD/LC50 values that are relevant for classification:

No data

Skin irritation or corrosion:

Irritant for skin and mucous membranes.

Eye irritation or corrosion:

Irritant effect.

Sensitization:

No sensitizing effect known.

Germ cell mutagenicity:

No effects known.

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.

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
Ecotoxical effects:
Remark:
Very toxic for fish
Additional ecological information:
Do not allow material to be released to the environment without official permits.
Water danger class 3 (Self-assessment): extremely hazardous for water.
Do not allow product to reach groundwater, water bodies or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into soil.
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
Hand over to disposers of hazardous waste.
Must be specially treated under adherence to official regulations.
Consult official regulations for proper disposal.
Uncleaned packagings:
Recommendation:
Disposal must be made according to official regulations.

SECTION 14. TRANSPORT INFORMATION

UN-Number
ADR, IMDG, IATA
UN1555
UN proper shipping name
ADR
1555 ARSENIC BROMIDE
IMDG, IATA
ARSENIC BROMIDE
Transport hazard class(es)
ADR
Class
6.1 (T5) Toxic substances.
Label

6.1
IMDG, IATA
Class
6.1 Toxic substances.
Label
6.1
Packing group
ADR, IMDG, IATA
II
14.5 Environmental hazards:
Environmentally hazardous substance, solid
Special precautions for user
Warning: Toxic substances.
Kemler Number: 60
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:
ADR
Excepted quantities (EQ):
E4
Limited quantities (LQ)
500 g
Transport category
2
Tunnel restriction code
D/E
Number/Letter:
UN "Model Regulation":
UN1555, ARSENIC BROMIDE, 6.1, II

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture
Australian Inventory of Chemical Substances

Substance is not listed.

Standard for the Uniform Scheduling of Drugs and Poisons

Substance is not listed.

National regulations

Information about limitation of use:

Employment restrictions concerning young persons must be observed.

For use only by technically qualified individuals.

Water hazard class:

Water danger class 3 (Self-assessment): extremely hazardous for water.

Other regulations, limitations and prohibitive regulations

ELINCS (European List of Notified Chemical Substances)

Substance is not listed.

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.