



<a href="#">Tellurium Bromide TeBr<sub>4</sub></a>		<a href="#">Pricing &gt;</a>
<a href="#">Ultra Dry Tellurium Bromide</a>		<a href="#">Pricing &gt;</a>
<b>Linear Formula</b>	TeBr <sub>4</sub>	
<b>Pubchem CID</b>	82311	
<b>MDL Number</b>	MFCD00049575	
<b>EC No.</b>	233-090-7	
<b>IUPAC Name</b>	N/A	
<b>Beilstein/Reaxys No.</b>	N/A	
<b>SMILES</b>	Br[Te](Br)(Br)Br	
<b>Inchl Identifier</b>	InChI=1S/Br4Te/c1-5(2,3)4	
<b>Inchl Key</b>	PTYIPBNVDTYPIO-UHFFFAOYSA-N	
<b>Signal Word</b>	Danger	
<b>Hazard Statements</b>	H314	
<b>Hazard Codes</b>	C	
<b>Risk Codes</b>	34	
<b>Safety Statements</b>	22-26-27-36/37/39-45	
<b>RTECS Number</b>	N/A	
<b>Transport Information</b>	UN 3260 8/PG 2	
<b>WGK Germany</b>	3	
<b>GHS Pictograms</b>	<p><a href="#">GHS05 Corrosive</a></p>  <p><a href="#">GHS06 Skull and Crossbones</a></p> 	

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## SAFETY DATA SHEET

Date Accessed: 05/01/2024

## SECTION 1. IDENTIFICATION

**Product Identifiers:** All applicable American Elements product codes for CAS #10031-27-3

**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

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## SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)  
GHS06 Skull and crossbones  
Acute Tox. 2 H300 Fatal if swallowed.  
GHS05 Corrosion  
Skin Corr. 1B H314 Causes severe skin burns and eye damage.  
Eye Dam. 1 H318 Causes serious eye damage.  
Hazards not otherwise classified No data available  
GHS label elements, including precautionary statements  
Hazard pictograms



GHS05 GHS06  
Signal word Danger  
Hazard statements  
H300 Fatal if swallowed.  
H314 Causes severe skin burns and eye damage.  
Precautionary statements  
P260 Do not breathe  
dust/fume/gas/mist/vapors/spray.  
P301+P310 IF SWALLOWED: Immediately call a  
POISON CENTER/ doctor  
P303+P361+P353 If on skin (or hair): Take off  
immediately all contaminated clothing. Rinse skin with  
water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405 Store locked up.

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

D2B - Toxic material causing other toxic effects

E - Corrosive material

Classification system

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

HEALTH

FIRE

REACTIVITY

3

0

1

Health (acute effects) = 3

Flammability = 0

Physical Hazard = 1

Other hazards

Results of PBT and vPvB assessment

PBT: N/A

vPvB: N/A

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### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substances

CAS No. / Substance Name:

10031-27-3 Tellurium (IV) bromide

Identification number(s):

EC number: 233-090-7

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### **SECTION 4. FIRST AID MEASURES**

Description of first aid measures

General information

Immediately remove any clothing soiled by the product.

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

Causes severe skin burns.

Causes serious eye damage.

Indication of any immediate medical attention and special treatment needed:

No data available

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## **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:

Toxic metal oxide fume

Hydrogen bromide (HBr)

Advice for firefighters

Protective equipment:

Wear self-contained respirator.

Wear fully protective impervious suit.

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## **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:

Use neutralizing agent.

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.

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## **SECTION 7. HANDLING AND STORAGE**

Handling  
Precautions for safe handling  
Handle under dry protective gas.  
Keep container tightly sealed.  
Store in cool, dry place in tightly closed containers.  
Ensure good ventilation at the workplace.  
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: Store away from water/moisture.  
Further information about storage conditions:  
Store under dry inert gas.  
This product is moisture sensitive.  
Keep container tightly sealed.  
Store in cool, dry conditions in well-sealed containers.  
Protect from humidity and water.  
Specific end use(s) No data available

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## **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:  
Tellurium and tellurium compounds (as Te)  
mg/m<sup>3</sup>  
ACGIH TLV 0.1  
Austria MAK 0.1  
Belgium TWA 0.1  
Denmark TWA 0.1  
Finland TWA 0.1; 0.3-STEL  
France VME 0.1  
Germany MAK 0.1  
Korea TLV 0.1

Netherlands MAC-TGG 0.1  
Norway TWA 0.1  
Poland TWA 0.1; 0.03-STEL  
Sweden NGV 0.1  
Switzerland MAK-W 0.1; 0.5-KZG-W  
United Kingdom TWA 0.1  
USA PEL 0.1  
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.  
Avoid contact with the eyes and skin.  
Maintain an ergonomically appropriate working environment.  
Breathing equipment: Use suitable respirator when high concentrations are present.  
Protection of hands:  
Impervious gloves  
Inspect gloves prior to use.  
The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.  
Eye protection:  
Tightly sealed goggles  
Full face protection  
Body protection: Protective work clothing.

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## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Information on basic physical and chemical properties

Appearance:

Form: Powder

Color: Yellow

Odor: No data available

Odor threshold: No data available.

pH: N/A

Melting point/Melting range: 380 °C (716 °F)

Boiling point/Boiling range: 420 °C (788 °F)

Sublimation temperature / start: No data available

Flash point: N/A

Flammability (solid, gas) No data available.

Ignition temperature: No data available

Decomposition temperature: No data available

Autoignition: No data available.

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower: No data available  
Upper: No data available  
Vapor pressure: N/A  
Density at 20 °C (68 °F): 4.31 g/cm<sup>3</sup> (35.967 lbs/gal)  
Relative density No data available.  
Vapor density N/A  
Evaporation rate N/A  
Solubility in / Miscibility with  
Water: Insoluble  
Partition coefficient (n-octanol/water): No data available.  
Viscosity:  
Dynamic: N/A  
Kinematic: N/A  
Other information No data available

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## **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: Water/moisture  
Hazardous decomposition products:  
Toxic metal oxide fume  
Hydrogen bromide

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## **SECTION 11. TOXICOLOGICAL INFORMATION**

Information on toxicological effects  
Acute toxicity:  
Fatal if swallowed.  
Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.  
LD/LC50 values that are relevant for classification: No data  
Skin irritation or corrosion: Causes severe skin burns.  
Eye irritation or corrosion: Causes serious eye damage.  
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: 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:  
Tellurium is converted in the body to dimethyl telluride which imparts a garlic-like odor to the breath and sweat. Heavy exposure may result in headache, drowsiness, metallic taste, loss of appetite, nausea, tremors, convulsions, and respiratory arrest. Reproductive effects in laboratory animals have been reported.  
Inorganic bromides may produce depression, emaciation and in severe cases, psychosis and mental deterioration. Bromoderma, a bromide rash, often occurs when bromide inhalation or administration is prolonged. This rash is usually found on the face and resembles acne and furunculosis.  
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.

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## **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

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## **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.

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## **SECTION 14. TRANSPORT INFORMATION**

UN-Number  
DOT, IMDG, IATA UN2923  
UN proper shipping name  
DOT Corrosive solids, toxic, n.o.s. (Tellurium (IV) bromide)  
IMDG, IATA CORROSIVE SOLID, TOXIC, N.O.S. (Tellurium (IV) bromide)  
Transport hazard class(es)  
DOT  
Class 8 Corrosive substances.  
Label 8+6.1  
Class 8 (CT2) Corrosive substances  
Label 8+6.1  
IMDG, IATA  
Class 8 Corrosive substances.  
Label 8+6.1  
Packing group  
DOT, IMDG, IATA II  
Environmental hazards: N/A  
Special precautions for user Warning: Corrosive substances  
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": UN2923, Corrosive solids, toxic, n.o.s. (Tellurium (IV) bromide), 8 (6.1), II

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## **SECTION 15. REGULATORY INFORMATION**

Safety, health and environmental regulations/legislation specific for the substance or mixture  
GHS label elements, including precautionary statements  
Hazard pictograms  
GHS05 GHS06  
Signal word Danger  
Hazard statements  
H300 Fatal if swallowed.  
H314 Causes severe skin burns and eye damage.  
Precautionary statements  
P260 Do not breathe

dust/fume/gas/mist/vapors/spray.  
P301+P310 IF SWALLOWED: Immediately call a  
POISON CENTER/ doctor  
P303+P361+P353 If on skin (or hair): Take off  
immediately all contaminated clothing. Rinse skin with  
water/shower.  
P305+P351+P338 IF IN EYES: Rinse cautiously with  
water for several minutes. Remove contact lenses, if  
present and easy to do. Continue rinsing.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance  
with local/regional/national/international regulations.  
National regulations  
All components of this product are listed in the U.S.  
Environmental Protection Agency Toxic Substances  
Control Act Chemical substance Inventory.  
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.  
Chemical safety assessment: A Chemical Safety  
Assessment has not been carried out.

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## **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.

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