

<a href="#">Cadmium Bromide</a>	<a href="#">Pricing &gt;</a>
<a href="#">Ultra Dry Cadmium Bromide</a>	<a href="#">Pricing &gt;</a>
<b>Linear Formula</b>	CdBr <sub>2</sub>
<b>Pubchem CID</b>	24609
<b>MDL Number</b>	MFCD00015996
<b>EC No.</b>	232-165-1
<b>IUPAC Name</b>	dibromocadmium
<b>Beilstein/Reaxys No.</b>	N/A
<b>SMILES</b>	Br[Cd]Br
<b>Inchl Identifier</b>	InChI=1S/2BrH.Cd/h2*1H;/q;;+2/p-2
<b>Inchl Key</b>	KPWJBEBFBLRCLH-UHFFFAOYSA-L
<b>Signal Word</b>	Warning
<b>Hazard Statements</b>	H302-H312-H332-H410
<b>Hazard Codes</b>	Xn, N
<b>Risk Codes</b>	N/A
<b>Safety Statements</b>	N/A
<b>Transport Information</b>	UN 3077 9 / PGIII
<b>WGK Germany</b>	3

[Create Printable PDF](#)

## SAFETY DATA SHEET

Date Accessed: 05/14/2024

Date Revised: 01/15/2022

### SECTION 1. IDENTIFICATION

**Product Identifiers:** All applicable American Elements product codes for CAS #7789-42-6

**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  
GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin.

Acute Tox. 4 H332 Harmful if inhaled.

GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).



Hazard pictograms

GHS07

Signal word Warning

Hazard-determining components of labeling:

cadmium bromide

Hazard statements

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P261 Avoid breathing

dust/fume/gas/mist/vapors/spray

P232 Protect from moisture.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

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.

Classification system:

NFPA ratings (scale 0 - 4)

3

0

0

Health = 3

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)

HEALTH  
FIRE  
REACTIVITY  
2  
0  
0  
Health = 2  
Fire = 0  
Reactivity = 0  
Other hazards  
Results of PBT and vPvB assessment  
PBT: N/A  
vPvB: N/A

---

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

Substances  
CAS # / Substance Name  
7789-42-6 cadmium bromide  
Identification number(s)  
EC number: 232-165-1  
Index number: 048-001-00-5

---

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

Description of first aid measures  
General information:  
Immediately remove any clothing soiled by the product.  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.  
If inhaled:  
Supply patient with fresh air. If not breathing, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.  
In case of unconsciousness place patient stably in side position for transportation.  
In case of skin contact: Immediately rinse with water.  
In case of eye contact: Rinse opened eye for several minutes under running water. Consult a physician.  
If swallowed: Immediately call a 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:

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Special hazards arising from the substance or mixture

No data available

Advice for firefighters

Protective equipment: Mouth respiratory protective device.

---

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures Not required.

Environmental precautions:

Do not allow product to enter drains, sewage systems, or other water courses.

Inform respective authorities in case of seepage into water courses, or sewage systems.

Methods and materials for containment and cleanup:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

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

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

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: Not required.

Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.  
Specific end use(s) No data available

---

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

7789-42-6 cadmium bromide

PEL Long-term value: 0.005 mg/m<sup>3</sup>

as Cd; see 29 CFR 1910.1027

REL See Pocket Guide App. A

TLV Long-term value: 0.01 0.002\* mg/m<sup>3</sup>

as Cd; \*respirable fraction; BEI

Ingredients with biological limit values:

7789-42-6 cadmium bromide

BEI 5 µg/g creatinine

Medium: urine

Time: not critical

Parameter: Cadmium (background)

5 µg/L

Medium: blood

Time: not critical

Parameter: Cadmium (background)

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use

respiratory protective device that is independent of circulating air.

Protection of hands:

SProtective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the

chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

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.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be

observed.

Eye protection: Safety glasses

---

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

Information on basic physical and chemical properties

Appearance:

Form: Powder

Color: White

Odor: Odorless

Odor threshold: No data available.

pH: N/A

Melting point/Melting range: 567 °C (1053 °F)

Boiling point/Boiling range: 863 °C (1585 °F)

Flash point: N/A

Flammability (solid, gas): Product is not flammable.

Ignition temperature:

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: no data hPa

Density at 20 °C (68 °F): 5.192 g/cm<sup>3</sup> (43.327 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

Solvent content:

Organic solvents: 0.0 %

VOC content: 0.0 g/l / 0.00 lb/gl

Solids content: 100.0 %

Other information No data available

---

## **SECTION 10. STABILITY AND REACTIVITY**

Reactivity No data available

Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used 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: No dangerous decomposition products known.

---

## **SECTION 11. TOXICOLOGICAL INFORMATION**

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:

Oral LD50 322 mg/kg (rat)

Primary irritant effect:

on the skin: No irritant effect.

on the eye: No irritating effect.

Sensitization: No sensitizing effects known.

Additional toxicological information:

Carcinogenic categories

IARC (International Agency for Research on Cancer)

7789-42-6 cadmium bromide 1

NTP (National Toxicology Program)

7789-42-6 cadmium bromide K

OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

---

## **SECTION 12. ECOLOGICAL INFORMATION**

Toxicity

Aquatic toxicity: No data available

Persistence and degradability No data available

Behavior in environmental systems:

Bioaccumulative potential No data available

Mobility in soil No data available

Additional ecological information: Not known to be hazardous to water.

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:

Must not be disposed of together with household garbage. Do not allow product to enter drains, sewage systems, or other water courses system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

---

## **SECTION 14. TRANSPORT INFORMATION**

UN-Number

DOT, IMDG, IATA UN2570

---

## **SECTION 15. REGULATORY INFORMATION**

UN proper shipping name

DOT, IATA Cadmium compounds

IMDG CADMIUM COMPOUND

Transport hazard class(es)

DOT

Class 6.1 Toxic substances

Label 6.1

IMDG, IATA

Class 6.1 Toxic substances

Label 6.1

Packing group

DOT, IMDG, IATA III

Environmental hazards:

Marine pollutant: No

Special precautions for user N/A

Danger code (Kemler): 60

EMS Number: F-A,S-A

Stowage Category A

Transport in bulk according to Annex II of  
MARPOL73/78 and the IBC Code N/A

Transport/Additional information:

DOT

Quantity limitations On passenger aircraft/rail: 100 kg

On cargo aircraft only: 200 kg

Hazardous substance: 10 lbs, 4.54 kg

IMDG

Limited quantities (LQ) 5 kg

Excepted quantities (EQ) Code: E1



Maximum net quantity per inner packaging: 30 g  
Maximum net quantity per outer packaging: 1000 g  
UN "Model Regulation": UN 2570 CADMIUM  
COMPOUNDS, 6.1, III  
15 Regulatory information  
Safety, health and environmental  
regulations/legislation specific for the substance or  
mixture  
Sara  
Section 355 (extremely hazardous substances):  
Substance is not listed.  
Section 313 (Specific toxic chemical listings):  
Substance is listed.  
TSCA (Toxic Substances Control Act):  
Substance is listed.  
Proposition 65  
Chemicals known to cause cancer:  
Substance is listed.  
Chemicals known to cause reproductive toxicity for  
females:  
Substance is not listed.  
Chemicals known to cause reproductive toxicity for  
males:  
Substance is not listed.  
Chemicals known to cause developmental toxicity:  
Substance is not listed.  
Carcinogenic categories  
EPA (Environmental Protection Agency)  
Substance is not listed.  
TLV (Threshold Limit Value established by ACGIH)  
Substance is not listed.  
NIOSH-Ca (National Institute for Occupational Safety  
and Health)  
Substance is not listed.  
GHS label elements  
The substance is classified and labeled according to  
the Globally Harmonized System (GHS).  
Hazard pictograms  
GHS07  
Signal word Warning  
Hazard-determining components of labeling:  
cadmium bromide  
Hazard statements  
H302+H312+H332 Harmful if swallowed, in contact  
with skin or if inhaled.  
Precautionary statements  
P280 Wear protective gloves/protective clothing/eye  
protection/face protection.  
P261 Avoid breathing  
dust/fume/gas/mist/vapors/spray  
P232 Protect from moisture.  
P305+P351+P338 If in eyes: Rinse cautiously with  
water for several minutes. Remove contact lenses, if  
present  
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.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out. and easy to do. Continue rinsing.

---

## **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.

---