

<a href="#">Beryllium Chloride</a>		<a href="#">Pricing &gt;</a>
<a href="#">Beryllium Chloride Solution</a>		<a href="#">Pricing &gt;</a>
<b>Linear Formula</b>	BeCl <sub>2</sub>	
<b>Pubchem CID</b>	24588	
<b>MDL Number</b>	MFCD00042674	
<b>EC No.</b>	232-116-4	
<b>IUPAC Name</b>	beryllium dichloride	
<b>Beilstein/Reaxys No.</b>	N/A	
<b>SMILES</b>	[Be+2].[Cl-].[Cl-]	
<b>Inchl Identifier</b>	InChI=1S/Be.2ClH/h;2*1H/q+2;;/p-2	
<b>Inchl Key</b>	LWBPNIJBHRISSS-UHFFFAOYSA-L	
<b>Signal Word</b>	Warning	
<b>Hazard Statements</b>	H302-H315-H319	
<b>Hazard Codes</b>	Xn	
<b>Precautionary Statements</b>	P301 + P312 + P330-P305 + P351 + P338	
<b>Flash Point</b>	Not applicable	
<b>Risk Codes</b>	22-36/37/38	
<b>Safety Statements</b>	26-36/37/39	
<b>RTECS Number</b>	OJ5950000	
<b>Transport Information</b>	NONH for all modes of transport	
<b>WGK Germany</b>	1	

GHS Pictograms

[GHS06 Skull  
and  
Crossbones](#)



[GHS07  
Exclamation  
Point](#)



[GHS08 Health  
Hazard](#)



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## SAFETY DATA SHEET

Date Accessed: 04/30/2024

Date Revised: 01/15/2022

### SECTION 1. IDENTIFICATION

**Product Identifiers:** All applicable American Elements product codes for CAS #7787-47-5

**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 in accordance with 29 CFR 1910 (OSHA HCS)  
GHS06 Skull and crossbones  
Acute Tox. 3 H301 Toxic if swallowed.  
Acute Tox. 2 H330 Fatal if inhaled.

GHS08 Health hazard

Carc. 1B

H350 May cause cancer.

STOT RE 1 H372 Causes damage to the lung and the blood through prolonged or repeated exposure. Route of exposure: Inhalative.

GHS07

Skin Irrit. 2

H315 Causes skin irritation.

Eye Irrit. 2

H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

Hazards not otherwise classified

No data available

GHS label elements

GHS label elements, including precautionary statements

Hazard pictograms



GHS06 GHS08

Signal word

Danger

Hazard statements

H301 Toxic if swallowed.

H330 Fatal if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H350 May cause cancer.

H335 May cause respiratory irritation.

H372 Causes damage to the lung and the blood through prolonged or repeated exposure. Route of exposure: Inhalative.

Precautionary statements

P260

Do not breathe dust/fume/gas/mist/vapors/spray.

P301+P310

IF SWALLOWED: Immediately call a POISON CENTER/ doctor/...

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

P320

Specific treatment is urgent (see on this label).

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  
D2A - Very toxic material causing other toxic effects  
Classification system  
HMIS ratings (scale 0-4)  
(Hazardous Materials Identification System)  
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:  
7787-47-5 Beryllium chloride  
Identification number(s):  
EC number: 232-116-4  
Index number: 004-002-00-2

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### **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

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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:  
Hydrogen chloride (HCl)  
Toxic metal oxide fume  
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:  
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

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:  
No data available  
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:  
No data available  
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

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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:  
Beryllium and compounds, as Be  
mg/m<sup>3</sup>  
ACGIH TLV 0.00005; 0.0002-ST  
EL (inhalable fraction);  
Confirmed human carcinogen  
Austria Carcinogen  
Belgium TWA 0.002; Carcinogen  
Denmark TWA 0.001  
Finland TWA 0.002; 0.006-STEL; Carcinogen  
France VME 0.002; C2 Carcinogen  
Germany Carcinogen  
Hungary TWA 0.001; Carcinogen  
Japan OEL 0.002; 2A Carcinogen  
Korea TLV 0.002; 0.01-STEL; Confirmed human carcinogen  
Netherlands MAC-TGG 0.002; Carcinogen  
Norway TWA 0.001  
Poland TWA 0.001; 0.003-STEL  
Russia 0.001-STEL; Carcinogen  
Sweden NGV 0.002; Carcinogen  
Switzerland MAK-W 0.002; Carcinogen

United Kingdom TWA 0.002; Carcinogen  
USA PEL 0.002  
7787-47-5 Beryllium chloride (100.0%)  
PEL (USA)

Long-term value: 0.002 mg/m<sup>3</sup>

Ceiling limit value: 0.005; 0.025\* mg/m<sup>3</sup>  
as Be; \*30 min peak per 8-hr shift  
REL (USA)

Ceiling limit value: 0.0005 mg/m<sup>3</sup>  
as Be; See Pocket Guide App. A  
TLV (USA)

Long-term value: 0.00005\* mg/m<sup>3</sup>  
as Be;\*inhalable; (SEN)NIC-DSEN;RSEN;Skin

EL (Canada) Long-term value: 0.002 mg/m<sup>3</sup>  
as Be; ACIGH A1, IARC 1

EV (Canada) Short-term value: 0.01 mg/m<sup>3</sup>

Long-term value: 0.002 mg/m<sup>3</sup>  
as Be

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.

Avoid contact with the eyes and skin.

Maintain an ergonomically appropriate working  
environment.

Breathing equipment:

Use self-contained respiratory protective device in  
emergency situations.

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.

Eye protection:

Safety glasses

Body protection:

Protective work clothing.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance:  
Form: Solid  
Color: White  
Odor: Odorless  
Odor threshold: Not determined.  
pH: N/A  
Melting point/Melting range: 399 °C (750 °F)  
Boiling point/Boiling range: 520 °C (968 °F)  
Sublimation temperature / start: Not determined  
Flash point: N/A  
Flammability (solid, gas)  
Not determined.  
Ignition temperature: Not determined  
Decomposition temperature: Not determined  
Autoignition: Not determined.  
Danger of explosion: Product does not present an explosion hazard.  
Explosion limits:  
Lower: Not determined  
Upper: Not determined  
Vapor pressure: N/A  
Density at 20 °C (68 °F): 1.899 g/cm<sup>3</sup> (15.847 lbs/gal)  
Relative density  
Not determined.  
Vapor density  
N/A  
Evaporation rate  
N/A  
Solubility in Water (H<sub>2</sub>O): Reacts with water forming hydrochloric acid (HCl)  
Heating occurs when water is added  
Partition coefficient (n-octanol/water): Not determined.  
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  
Reacts with water forming hydrochloric acid (HCl)  
Heating occurs when water is added  
Conditions to avoid  
No data available



Incompatible materials:  
Bases  
No data available  
Hazardous decomposition products:  
Hydrogen chloride (HCl)  
Toxic metal oxide fume

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## **SECTION 11. TOXICOLOGICAL INFORMATION**

Information on toxicological effects

Acute toxicity:

Fatal if inhaled.

Toxic if swallowed.

LD/LC50 values that are relevant for classification:

Beryllium chloride (CAS# 7787-47-5)

Oral: LD50: 92 mg/kg (mus)

LD50: 86 mg/kg (rat)

Skin irritation or corrosion:

Causes skin irritation.

Eye irritation or corrosion:

Causes serious eye irritation.

Sensitization:

May cause an allergic skin reaction.

Germ cell mutagenicity:

No effects known.

Carcinogenicity:

May cause cancer.

EPA-B2: Probable human carcinogen, sufficient evidence from animal studies; inadequate evidence or no data from epidemiologic studies.

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

NTP-R: Reasonably anticipated to be a carcinogen: limited evidence from studies in humans or sufficient evidence from studies in experimental animals.

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

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

Reproductive toxicity:

No effects known.

Specific target organ system toxicity - repeated exposure:

Causes damage to the lung and the blood through prolonged or repeated exposure. Route of exposure: Inhalative.

Specific target organ system toxicity - single exposure:

May cause respiratory irritation.

Aspiration hazard:  
No effects known.  
Other information (about experimental toxicology):  
Mutagenic effects have been observed on tests with laboratory animals.  
Mutagenic effects have been observed on tests with bacteria.  
Tumorigenic effects have been observed on tests with laboratory animals.  
Carcinogenic effects have been observed on tests with laboratory animals.  
Subacute to chronic toxicity:  
Acute exposure to beryllium may cause dermatitis, chronic skin ulcers, rhinitis, nasopharyngitis, epistaxis, bronchitis, pneumonitis possibly fatal, fever, rales, dyspnea and substernal pain. Chronic exposure causes a delayed form of lung disease which may be delayed for five years or more after exposure stops. Symptoms include coughing, shortness of breath, loss of appetite, weight loss and fatigue. Cyanosis is common with elevated pulse and respiratory rates. This disease may progress to death from cardiac or respiratory failure.  
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  
Ecotoxicological effects:  
Remark:  
Toxic for aquatic organisms  
Additional ecological information:  
Do not allow material to be released to the environment without official permits.  
Toxic for aquatic organisms  
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.  
Toxic to aquatic life.

May cause long lasting harmful effects to aquatic life.  
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  
UN1566  
UN proper shipping name  
DOT  
Beryllium compounds, n.o.s. (Beryllium chloride)  
IMDG, IATA  
BERYLLIUM COMPOUND, N.O.S. (Beryllium  
chloride)  
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  
Special precautions for user  
Warning: Toxic 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  
Item:  
UN "Model Regulation":  
UN1566, Beryllium compounds, n.o.s. (Beryllium  
chloride), 6.1, II

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## **SECTION 15. REGULATORY INFORMATION**

Safety, health and environmental  
regulations/legislation specific for the substance or  
mixture  
GHS GHS label elements, including precautionary  
statements  
Hazard pictograms  
GHS06  
GHS08  
Signal word  
Danger  
Hazard statements  
H301 Toxic if swallowed.  
H330 Fatal if inhaled.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.  
H350 May cause cancer.  
H335 May cause respiratory irritation.  
H372 Causes damage to the lung and the blood  
through prolonged or repeated exposure. Route of  
exposure: Inhalative.  
Precautionary statements  
P260  
Do not breathe dust/fume/gas/mist/vapors/spray.  
P301+P310  
IF SWALLOWED: Immediately call a POISON  
CENTER/ doctor/...  
P305+P351+P338 IF IN EYES: Rinse cautiously with  
water for several minutes. Remove contact lenses, if  
present and easy to do. Continue rinsing.  
P320  
Specific treatment is urgent (see on this label).  
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)

7787-47-5 Beryllium chloride

California Proposition 65

Prop 65 - Chemicals known to cause cancer

7787-47-5 Beryllium chloride

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.

This product contains beryllium and is subject to the reporting requirements of section 313 of the Emergency Planning and Community Right to Know Act of 1986 and 40CFR372.

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. 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

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