

**BERYLLIUM OXIDE****1325**  
April 2000CAS No: 1304-56-9  
RTECS No: DS4025000  
UN No: 1566  
EC No: 004-003-00-8Beryllia  
Beryllium monoxide  
BeO  
Molecular mass: 25.0

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
<b>FIRE</b>	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: use appropriate extinguishing media.
<b>EXPLOSION</b>			

EXPOSURE		PREVENT DISPERSION OF DUST! AVOID ALL CONTACT!	IN ALL CASES CONSULT A DOCTOR!
<b>Inhalation</b>	Cough. Shortness of breath. Sore throat. Symptoms may be delayed (see Notes).	Closed system and ventilation.	Fresh air, rest. Refer for medical attention.
<b>Skin</b>	Redness.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse skin with plenty of water or shower.
<b>Eyes</b>	Redness. Pain.	Face shield, or eye protection in combination with breathing protection if powder.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
<b>Ingestion</b>		Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING	
Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment. Chemical protection suit including self-contained breathing apparatus.	T+ Symbol R: 49-25-26-36/37/38-43-48/23 S: 53-45 Note: E UN Hazard Class: 6.1 UN Pack Group: II	Unbreakable packaging; put breakable packaging into closed unbreakable container. Do not transport with food and feedstuffs.

EMERGENCY RESPONSE	SAFE STORAGE
Transport Emergency Card: TEC (R)-61GT5-II	Separated from food and feedstuffs. Well closed.

### IMPORTANT DATA

**Physical State; Appearance**

WHITE CRYSTALS OR POWDER.

**Chemical dangers**

Upon heating, toxic fumes are formed.

**Occupational exposure limits**

TLV: (as Be) 0.002 mg/m<sup>3</sup> as TWA; 0.01 mg/m<sup>3</sup> as STEL; A1; (ACGIH 2004).

MAK: Sah; Carcinogen category: 1; (DFG 2004).

**Routes of exposure**

The substance can be absorbed into the body by inhalation of its aerosol and by ingestion.

**Inhalation risk**

Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed.

**Effects of short-term exposure**

The substance is irritating to the eyes, the skin and the respiratory tract. Inhalation of the dust may cause chemical pneumonitis. The effects may be delayed. Medical observation is indicated. Exposure may result in death.

**Effects of long-term or repeated exposure**

Repeated or prolonged contact may cause skin sensitization. Lungs may be affected by repeated or prolonged exposure, resulting in chronic beryllium disease (cough, weight loss, weakness). This substance is carcinogenic to humans.

### PHYSICAL PROPERTIES

Boiling point: 3900°C  
Melting point: 2530°C

Density: 3.0 g/cm<sup>3</sup>  
Solubility in water: at 20 °C none

### ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms. The substance may cause long-term effects in the aquatic environment.

### NOTES

The symptoms of acute pneumonitis following a massive short-term exposure do not become manifest until 3 days.

Depending on the degree of exposure, periodic medical examination is suggested.

Do NOT take working clothes home.

Card has been partly updated in October 2004. See sections Occupational Exposure Limits, EU classification, Emergency Response.

### ADDITIONAL INFORMATION

**LEGAL NOTICE**

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible