

Article Number: 25 xxxxxx  
Article Description: **Barium fluoride, crystalline**

## 1. Identification of the substance and the company

Article number: 25 xxxxxx  
Article name: **barium fluoride, crystalline**

*Details about producer / supplier*

Company: Korth Kristalle GmbH \* Am Jägersberg 3 \* D-24161 Altenholz \* Tel ++49 431 36905-0  
Informing Department: Telephone: ++49 431 36905-0 Fax: ++49 431 36905-25  
Emergency Call: Telephone: ++49 431 36905-0 Fax: ++49 431 36905-25

## 2. Composition / Information on ingredients

*Synonyms*

CAS-No.: 7787-32-8 EC-Index-No.: 056-002-00-7

Molecular weight: 175.34 EC-Number: 232-108-0

Chemical Name: **BaF<sub>2</sub>**

## 3. Hazard Information

Harmful by inhalation and if swallowed.

## 4. First Aid Measures

General: Consult a physician or a chemist for specific advice.  
Inhalation: fresh air  
Eyes: Irrigate thoroughly with water.  
Skin: Wash off thoroughly with water. Remove contaminated clothing.  
Ingestion: Give plenty of water to drink, call a physician

## 5. Fire Fighting Measures

**Extinguishing Media**

Water  
foam  
CO<sub>2</sub>  
dry chemical  
In adaption to materials stored in the immediate neighbourhood.

**Special risks**

Non-combustible. Ambient fire may liberate hazardous vapours. Hydrogen fluoride may develop in event of fire.

**Special protective equipment for the fire fighting**

Do not stay in dangerous zone without chemical protection clothing and self-contained breathing apparatus.

**Other Information**

Prevent fire-fighting water from entering surface water or groundwater.

## 6. Accidental Release Measures

Avoid generation of dusts; do not inhale dusts.  
Do not allow to enter sewerage system.

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## **7. Handling and storage**

### *Handling*

No special measures required.

### *Storage*

Tightly closed. Dry. Storage temperature: no restrictions.

## **8. Exposure control and personal protection**

### *Exposure Limits*

German regulations

MAK Germany (max. workplace conc.)

Barium compounds soluble (as Ba) 0.5 mg/m<sup>3</sup>

Peak limit II,1 resorptive substance, 2 x TLV

Fluorides (as Fluorine) 2.5 mg/m<sup>3</sup>

Peak limit II,2 resorptive substance, 2 x TLV

### *Personal protection equipment*

General protection and hygienic measures:

Apply the usual safety instructions for the handling of chemicals.

Do not drink, eat, smoke or snuff during work.

Before taking a break and after finishing work wash hands and/or face.

Avoid dust creation.

Respiration protection: No special measures required if handled as crystal material.

Eye protection: No special measures required if handled as crystal material.

Body protection: No special measures required if handled as crystal material.

## **9. Physical and chemical properties**

### *Appearance*

Shape: solid

Colour: no colour

Odour: no odour

### *Security Data*

Changes of state: Melting Point 1353°C Boiling Point 2260°C @ 1013 hPa

Flash Point: Not applicable

Fire Point: Not applicable

Lower Explosion Limit: Not applicable

Upper Explosion Limit: Not applicable

Specific Gravity: 4.83 g/cm<sup>3</sup> @ 20°C

Bulk Weight: Not applicable

Solubility in Water: 1,2g/l H<sub>2</sub>O @ 25 °C

## **10. Stability and Reactivity**

Stable under normal conditions of storage and use

### *Conditions to avoid*

none

### *Materials to avoid*

not known to date

### *Hazardous products of decomposition*

see chapter 5

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## **11. Toxicological Information**

### *Toxic Dose*

LD50: 250 mg/kg oral rat

### *Further Information*

The following applies to soluble barium compounds in general: after swallowing: mucosal irritation, nausea, salivation, vomiting, dizziness, pain, colics, diarrhoea.

Systematic effects include: cardiac dysrhythmias, bradycardia (subdued cardiac activity), rise in blood pressure, shock and circulatory collapse as well as muscular rigidity, spasms

## **12. Ecological Information**

Ecotoxic effects:

Biological effects: Toxic for aquatic organisms. Hazard for drinking water supplies.

Further ecologic data: The following applies to barium compounds: biological effects: fish: lethal as from 158 mg/l; salmo lethal as from 158 mg/l (as BaCl<sub>2</sub>); L. idus LC50: 870 mg/l (as BaCl<sub>2</sub>); barium ions toxic for aquatic organisms: algae: Sc. quadricauda toxic as from 34 mg/l; crustaceans: toxic as from 29 mg/l; hazard for drinking water.

## **13. Disposal considerations**

### *Product*

There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

### *Packing*

Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

## **14. Transport Information**

Land transport GGVS, GGVE, ADR, RID  
Classification 6.1/60c  
Name 1564 Bariumverbindung, N.A.G. (Bariumfluorid)  
River transport AND, ADNR  
Classification: not tested

Sea ship transport IMDG, GGVSee  
Classification 6.1/ UN 1564/PG III  
Ems 6.1-0  
MFAG 120  
Name Barium compound, N.O.S. (Barium fluoride)

Air transport ICAO, IATA  
Classification: 6.1/UN 1564/PG III  
Name: Barium Compounds, N.O.S.

The transport regulations are cited acc. to international regulations and in the form applicable in Germany (GGVS/GGVE). Possible national deviations in other countries are not considered.

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## **15. Regulatory Information**

*Labelling according to EC instructions*

Symbol: Xn Harmful

R-Phrases: 20/22 Harmful by inhalation and if swallowed.

S-Phrases: 28 After contact with skin, wash immediately with plenty of water

*German instructions:*

water endangering class: 1  
storage class VCI: 10-13

## **16. Other Information**

Revision Date: May 2000

11.08.97

*This information is based on our recent knowledge and is used for the description of the product in respect of necessary safety measures. It is not to be understood as an assurance of properties of the product described.*