

Revision Date 04-Jun-2012

Revision Number 4

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### Product Identifier

**Product Description:** Barium fluoride

### Relevant identified uses of the substance or mixture and uses advised against

**Recommended Use** Laboratory chemicals  
**Uses advised against** No Information available

### Details of the supplier of the safety data sheet

#### Company

Acros Organics BVBA  
 Janssen Pharmaceuticaaan 3a  
 2440 Geel, Belgium

**E-mail address** begel.sdsdesk@thermofisher.com

### Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01  
 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99

Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300

CHEMTREC Phone Number, Europe: 001-703-527-3887

## SECTION 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

#### REGULATION (EC) No 1272/2008

Acute oral toxicity	Category 3
Acute Inhalation Toxicity - Dusts and Mists	Category 4

### Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

**Symbol(s)** Xn - Harmful

#### R-phrases

**Risk Combination Phrases** R20/22 - Harmful by inhalation and if swallowed

### Label Elements

Barium fluoride

Revision Date 04-Jun-2012

## SECTION 2. HAZARDS IDENTIFICATION



### Signal Word

**Danger**

### Hazard Statements

H332 - Harmful if inhaled  
H301 - Toxic if swallowed

### Precautionary Statements - EU (§28, 1272/2008)

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician  
P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

### Other Hazards

No information available.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.
Barium fluoride 7787-32-8	EEC No. 232-108-0	>95	7787-32-8	Xn; R20/22	Acute Tox. 4 (H332) Acute Tox. 3 (H301)	-

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

## SECTION 4. FIRST AID MEASURES

### Description of first aid measures

#### Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

#### Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

#### Ingestion

Do not induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. If possible drink milk afterwards.

**Barium fluoride****Revision Date** 04-Jun-2012**Inhalation** Remove from exposure, lie down. Move to fresh air.**Notes to Physician** Treat symptomatically**SECTION 5. FIRE-FIGHTING MEASURES****Extinguishing media****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

**Extinguishing media which must not be used for safety reasons**

No information available.

**Special hazards arising from the substance or mixture**

Thermal decomposition can lead to release of irritating gases and vapors

**Advice for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**SECTION 6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation

**Environmental precautions**

Prevent further leakage or spillage if safe to do so

**Methods and material for containment and cleaning up**

Sweep up or vacuum up spillage and collect in suitable container for disposal.

**SECTION 7. HANDLING AND STORAGE****Precautions for Safe Handling**

Ensure adequate ventilation

**Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place

**Specific End Uses**

Barium fluoride

Revision Date 04-Jun-2012

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure limits

##### Component

Barium fluoride

European Union	The United Kingdom	France	Belgium	Spain
	STEL: 7.5 mg/m <sup>3</sup> 15 min TWA: 2.5 mg/m <sup>3</sup> 8 hr	VME: 2.5 mg/m <sup>3</sup> 8 heures. indicative limit		VLA-ED: 2.5 mg/m <sup>3</sup> 8 horas

##### Component

Barium fluoride

Italy	Germany	Portugal	The Netherlands	Finland
	MAK: 0.5 mg/m <sup>3</sup> 8 Stunden. inhalable fraction Peak: 4 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> 8 Stunden. F inhalable fraction exposure factor 4	TWA: 2.5 mg/m <sup>3</sup> 8 horas		

##### Component

Barium fluoride

Austria	Denmark	Switzerland	Poland	Norway
				TWA: 0.6 mg/m <sup>3</sup> 8 timer TWA: 0.5 mg/m <sup>3</sup> 8 timer

##### Component

Barium fluoride

Latvia	Lithuania	Luxembourg	Malta	Romania
TWA: 0.1 mg/m <sup>3</sup>				

##### Component

Barium fluoride

Russia - TWA	Slovak Republic	Slovenia	Sweden	Turkey
TWA: 0.2 mg/m <sup>3</sup> F STEL: 1 mg/m <sup>3</sup> aerosol				

### Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

### Derived No Effect Level (DNEL)

No information available.

### Predicted No Effect Concentration (PNEC)

No information available.

### Exposure controls

#### Engineering Measures

Ensure adequate ventilation, especially in confined areas

#### Personal protective equipment

##### Eye Protection

Safety glasses with side-shields Goggles

##### Hand Protection

Protective gloves

##### Skin and body protection

Long sleeved clothing

##### Respiratory Protection

Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

### Environmental exposure controls

No information available.

Barium fluoride

Revision Date 04-Jun-2012

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Powder, Solid
Appearance	White
Boiling Point/Range	2260°C / 4100°F
Melting Point/Range	1354°C / 2469.2°F
Flash Point	No information available.
Autoignition Temperature	No information available.
Water Solubility	1.6 G/L WATER (20°C)
Specific Gravity	4.890
Molecular Formula	Ba F <sub>2</sub>
Molecular Weight	175.34

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

### Chemical Stability

Stable under normal conditions.

### Possibility of Hazardous Reactions

Hazardous Polymerization	No information available.
Hazardous Reactions .	No information available.

### Conditions to Avoid

Excess heat, Incompatible products.

### Incompatible Materials

Acids.

### Hazardous Decomposition Products

Gaseous hydrogen fluoride (HF).

## SECTION 11. TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

### Acute Toxicity

### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation (Dust)
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Barium fluoride

Revision Date 04-Jun-2012

## SECTION 11. TOXICOLOGICAL INFORMATION

Barium fluoride	250 mg/kg ( Rat )		
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### Chronic Toxicity

#### **Carcinogenicity**

There are no known carcinogenic chemicals in this product

#### **Sensitization**

No information available.

#### **Mutagenic Effects**

No information available

#### **Reproductive Effects**

No information available.

#### **Developmental Effects**

No information available.

#### **Target Organs**

No information available.

#### **Endocrine Disruptor Information**

None known

## SECTION 12. ECOLOGICAL INFORMATION

### Toxicity

#### **Ecotoxicity effects**

Do not empty into drains

### Persistence and degradability

No information available

### Bioaccumulative potential

No information available.

### Mobility in soil

No information available.

### Results of PBT and vPvB assessment

### Other adverse effects

No information available

## SECTION 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

#### **Waste from Residues / Unused Products**

Dispose of in accordance with local regulations

#### **Contaminated Packaging**

Empty containers should be taken to local recyclers for disposal

## SECTION 14. TRANSPORT INFORMATION

### IMDG/IMO

Barium fluoride

Revision Date 04-Jun-2012

## SECTION 14. TRANSPORT INFORMATION

**UN-No** 1564  
**Hazard Class** 6.1  
**Packing Group** III  
**Proper Shipping Name** BARIUM COMPOUND, N.O.S.

### ADR

**UN-No** 1564  
**Hazard Class** 6.1  
**Packing Group** III  
**Proper Shipping Name** BARIUM COMPOUND, N.O.S.

### IATA

**UN-No** 1564  
**Hazard Class** 6.1  
**Packing Group** III  
**Proper Shipping Name** BARIUM COMPOUND, N.O.S.

## SECTION 15. REGULATORY INFORMATION

### Safety, health and environmental regulations/legislation specific for the substance or mixture

#### International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Barium fluoride	232-108-0	-		X	X	-	X	X	X	X	X

### Legend

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**CHINA** - China Inventory of Existing Chemical Substances

**AICS** - Inventory of Chemical Substances

**KECL** - Existing and Evaluated Chemical Substances

### Chemical Safety Assessment

Barium fluoride

Revision Date 04-Jun-2012

**SECTION 16. OTHER INFORMATION****Full text of R-phrases referred to under sections 2 and 3**

R20/22 - Harmful by inhalation and if swallowed

Revision Date 04-Jun-2012

**Revision Summary**

Reason for revision (M)SDS sections updated, 3.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

**Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet