SAFETY DATA SHEET
BARIUM FLUORIDE

Page: 1
Compilation date: 06/09/2007
Revision date: 29/10/2015
Revision No: 5.1

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: BARIUM FLUORIDE
CAS number: 7787-32-8
EINECS number: 232-108-0
Index number: 056-002-00-7

1.2. Relevant identified uses of the substance or mixture and uses advised against


1.3. Details of the supplier of the safety data sheet

Company name: Resource Chemical Ltd
Resource House
76 High Street
Brackley
Northants
NN13 7DS
Tel: +44(0)1280 843800
Fax: +44(0)1280 701745
Email: sales@resourcechemical.ltd.uk

1.4. Emergency telephone number

Emergency tel: +44(0)1270 502891

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Acute Tox. 3: H301; Acute Tox. 4: H332; Eye Irrit. 2: H319

Most important adverse effects: Toxic if swallowed. Harmful if inhaled. Causes serious eye irritation.

2.2. Label elements

Label elements:

Hazard statements: H301: Toxic if swallowed.
H332: Harmful if inhaled.
H319: Causes serious eye irritation.

Signal words: Danger

Hazard pictograms: GHS06: Skull and crossbones
GHS07: Exclamation mark

[cont...]
SAFETY DATA SHEET
BARIUM FLUORIDE

Precautionary statements:
P261: Avoid breathing dust/fumes/gas/mist/vapours/spray.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+310: IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.1. Substances

Chemical identity: BARIUM FLUORIDE
CAS number: 7787-32-8
EINECS number: 232-108-0

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: Not applicable.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.
5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS. Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. The floor of the storage room must be impermeable to prevent the escape of liquids.

Suitable packaging: Polyethylene.

7.3. Specific end use(s)

Specific end use(s): No special requirement.

Section 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Workplace exposure limits:</th>
<th>Respirable dust</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>8 hour TWA</td>
</tr>
</tbody>
</table>

[cont...]
8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area. The floor of the storage room must be impermeable to prevent the escape of liquids.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter. Particle filter class P3S (EN143).

Hand protection: Protective gloves. PVC gloves. Rubber gloves.

Eye protection: Safety goggles. Ensure eye bath is to hand.

Skin protection: Protective clothing.

Environmental: Refer to specific Member State legislation for requirements under Community environmental legislation.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Powder
Colour: White
Odour: Odourless
Evaporation rate: No data available.
Oxidising: Non-oxidising (by EC criteria)
Solubility in water: Slightly soluble
Also soluble in: Ammonium chloride solution
Viscosity: No data available.

Boiling point/range °C: 2260
Melting point/range °C: 1290
Flammability limits %: lower: No data available. upper: No data available.
Flash point °C: No data available.
Auto-flammability °C: No data available.
Part. coeff. n-octanol/water: No data available.
Vapour pressure: No data available.
PH: 4-7
VOC g/l: No data available.

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.
10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values:

<table>
<thead>
<tr>
<th>Route</th>
<th>Species</th>
<th>Test</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORL</td>
<td>RAT</td>
<td>LD50</td>
<td>250</td>
<td>mg/kg</td>
</tr>
<tr>
<td>DERMAL</td>
<td>RBT</td>
<td>LD50</td>
<td>&gt;2000</td>
<td>mg/kg</td>
</tr>
</tbody>
</table>

Relevant hazards for substance:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (ac. tox. 4)</td>
<td>INH</td>
<td>Hazardous: calculated</td>
</tr>
<tr>
<td>Acute toxicity (ac. tox. 3)</td>
<td>ING</td>
<td>Hazardous: calculated</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>OPT</td>
<td>Hazardous: calculated</td>
</tr>
</tbody>
</table>

Symptoms / routes of exposure

- **Skin contact**: There may be irritation and redness at the site of contact.
- **Eye contact**: There may be irritation and redness. The eyes may water profusely.
- **Ingestion**: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.
- **Inhalation**: There may be irritation of the throat with a feeling of tightness in the chest.
- **Delayed / immediate effects**: Immediate effects can be expected after short-term exposure.

Section 12: Ecological information

12.1. Toxicity
Ecotoxicity values:

<table>
<thead>
<tr>
<th>Species</th>
<th>Test</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daphnia magna</td>
<td>48H EC50</td>
<td>14.5</td>
<td>mg/l</td>
</tr>
<tr>
<td>ZEBRAFISH (Brachydanio rerio)</td>
<td>96H LC50</td>
<td>&gt;152</td>
<td>mg/l</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

Persistence and degradability: Not applicable.

12.3. Bioaccumulative potential

Bioaccumulative potential: Bioaccumulation potential.

12.4. Mobility in soil

Mobility: Soluble in water.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Toxic to aquatic organisms. Toxic to soil organisms.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Mix or dissolve with a combustible material and burn in a chemical incinerator equipped with afterburners and scrubbers.

Disposal of packaging: Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

14.1. UN number

UN number: UN1564

14.2. UN proper shipping name

Shipping name: BARIUM COMPOUND, N.O.S. (Barium fluoride)

14.3. Transport hazard class(es)

Transport class: 6.1

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmentally hazardous: No Marine pollutant: No

[cont...]
14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 2

Section 15: Regulatory information

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

Specific regulations: This product is a Seveso category/named substance in Annex I of Council Directive 96/82/EC.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010. This safety data sheet is prepared in accordance with Commission Regulation (EC) No 1272/2008.

Phrases used in s.2 and s.3:

H301: Toxic if swallowed.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.