1. **Identification of the substance/mixture and of the company/undertaking**

1.1 **Product identifier**
- **Product name**: Beryllium fluoride, 33% (w/w) aqueous solution
- **Product code**: GK1240
- **CAS number**: 7787-49-7
- **EINECS**: 232-118-5

1.2 **Relevant identified uses of the substance or mixture and uses advised against**
- PC21: Laboratory chemicals.

1.3 **Details of the supplier of the safety data sheet**
- **Company name**: Glentham Life Sciences Ltd
- **Telephone**: +44 (0) 1225 667 798
- **Fax**: +44 (0) 2033 978 909
- **Edinburgh Way**: Corsham
- **Email**: info@glentham.com
- **Web**: www.glentham.com
- **Unit 5 Ingoldmells Court**: Edinburgh Way
- **Wiltshire, SN13 9XN**

1.4 **Emergency telephone number**
- Emergency telephone number: +44 (0) 1225 667 798 (09.00 - 17.00 GMT)

1.5 **REACH**
- A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

2. **Hazards identification**

2.1 **Classification of the substance or mixture**

Classification under CLP

2.2 **Label elements**

**Label elements under CLP**

- **Pictograms**
- **Signal words**: Danger
- **Hazard statements**
  - H301: Toxic if swallowed.
  - H311: Toxic in contact with skin.
  - H314: Causes severe skin burns and eye damage.
  - H330: Fatal if inhaled.
  - H350: May cause cancer.
  - H372: Causes damage to organs.
  - H411: Toxic to aquatic life with long lasting effects.

- **Precautionary statements**
  - P201: Obtain special instructions before use.
  - P260: Do not breathe dust/fume/gas/mist/vapours/spray.
  - P284: Wear respiratory protection.
  - P361: Remove/Take off immediately all contaminated clothing.
  - P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
  - P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  - P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P310: Immediately call a POISON CENTER or doctor/physician.
  - P308 + P313: IF exposed or concerned: Get medical advice/attention.

2.3 **Other hazards**

PBT
- This substance is not identified as a PBT substance.

3.0 **Composition/information on ingredients**

3.1 **Substances**
4.0 First aid measures

4.1 Description of first aid measures

Skin contact
Wash immediately with plenty of soap and water. 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. Transfer to hospital if there are burns or symptoms of poisoning.

Eye contact
Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

Ingestion
Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Give 1 cup of water to drink every 10 minutes. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

Inhalation
Consult a doctor. Remove casualty from exposure ensuring one’s own safety whilst doing so. If conscious, ensure the casualty sits or lies down. If unconscious and breathing is OK, place in the recovery position. If unconscious, check for breathing and apply artificial respiration if necessary. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact
There may be mild irritation at the site of contact. There may be redness or whiteness of the skin in the area of exposure. Irritation or pain may occur at the site of contact. Blistering may occur. Progressive ulceration will occur if treatment is not immediate. Absorption through the skin may be fatal.

Eye contact
There may be irritation and redness. There may be severe pain. The eyes may water profusely. Corneal burns may occur. May cause permanent damage.

Ingestion
There may be soreness and redness of the mouth and throat. Corrosive burns may appear around the lips. There may be vomiting. Blood may be vomited. There may be bleeding from the mouth or nose. Convulsions may occur. There may be loss of consciousness. There may be irritation of the throat.

Inhalation
There may be irritation of the throat with a feeling of tightness in the chest. There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing. There may be loss of consciousness. Convulsions may occur. Absorption through the lungs can occur causing symptoms similar to those of ingestion.

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
Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. Eye bathing equipment should be available on the premises. Not applicable.

5.0 Fire-fighting measures

5.1 Extinguishing media
Use water spray to cool containers. Suitable extinguishing media for the surrounding fire should be used.

5.2 Special hazards arising from the substance or mixture

Exposure hazards

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

6.0 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions
Refer to section 8 of SDS for personal protection details. Notify the police and fire brigade immediately. 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. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Do not create dust. Evacuate the area immediately.

6.2 **Environmental precautions**
Do not discharge into drains or rivers. Alert the neighbourhood to the presence of fumes or gas.

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. Clean-up should be dealt with only by qualified personnel familiar with the specific substance.

6.3 **Reference to other sections**
Refer to section 8 of SDS.

7.0 **Handling and storage**

7.1 **Precautions for safe handling**
**Handling requirements**
Ensure there is sufficient ventilation of the area. Ensure there is exhaust ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air. Avoid direct contact with the substance.

7.2 **Conditions for safe storage, including any incompatibilities**
**Storage conditions**
Store in cool, well ventilated area. Keep container tightly closed. Avoid contact with water or humidity.

7.3 **Specific end use(s)**
No data available.

8.0 **Exposure controls/personal protection**

8.1 **Control parameters**
**Workplace exposure limits**
Not applicable.

8.2 **Exposure controls**
**Engineering measures**
Ensure there is sufficient ventilation of the area. Ensure there is exhaust ventilation of the area. Not applicable.

**Respiratory protection**
Respiratory protective device with particle filter. Particle filter class P1 (EN143). Self-contained breathing apparatus must be available in case of emergency.

**Hand protection**
Protective gloves.

**Eye protection**
Safety glasses. Safety glasses with side-shields. Tightly fitting safety goggles. Ensure eye bath is to hand.

**Skin protection**
Protective clothing.

8.3 **Other information**
Not applicable.

9.0 **Physical and chemical properties**

9.1 **Information on basic physical and chemical properties**
**Physical Form:** Liquid
**Colour:** Colourless

9.2 **Other information**
Not applicable.

10.0 **Stability and reactivity**

10.1 **Reactivity**
Stable under recommended transport or storage conditions.

10.2 **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

10.5 Incompatible materials
Materials to avoid
Strong acids. Strong oxidising agents.

11.0 Toxicological information
11.1 Information on toxicological effects
Toxicity values
Not applicable.

11.2 Information on toxicological effects
Skin contact
There may be mild irritation at the site of contact. There may be redness or whiteness of the skin in the area of exposure. Irritation or pain may occur at the site of contact. Blistering may occur. Progressive ulceration will occur if treatment is not immediate. Absorption through the skin may be fatal.

Eye contact
There may be irritation and redness. There may be severe pain. The eyes may water profusely. Corneal burns may occur. May cause permanent damage.

Ingestion
There may be soreness and redness of the mouth and throat. Corrosive burns may appear around the lips. There may be vomiting. Blood may be vomited. There may be bleeding from the mouth or nose. Convulsions may occur. There may be loss of consciousness. There may be irritation of the throat.

Inhalation
There may be irritation of the throat with a feeling of tightness in the chest. There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing. There may be loss of consciousness. Convulsions may occur. Absorption through the lungs can occur causing symptoms similar to those of ingestion.

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

Other information

12.0 Ecological information
12.1 Toxicity
Not applicable.

12.2 Persistence and degradability
Not biodegradable. Biodegradable.

12.3 Bioaccumulative potential
No bioaccumulation potential. Bioaccumulation potential.

12.4 Mobility in soil
Readily absorbed into soil.

12.5 Results of PBT and vPvB assessment
This substance is not identified as a PBT substance.

12.6 Other adverse effects
Negligible ecotoxicity. Toxic to aquatic organisms.

13.0 Disposal considerations
13.1 Waste treatment methods
Disposal operations
Transfer to a suitable container and arrange for collection by specialised disposal company.

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

14.0 Transport information
14.1 UN number
UN1566

14.2 UN proper shipping name
Beryllium compound, n.o.s. (Beryllium fluoride, 33% (w/w) aqueous solution)

14.3 Transport hazard class(es)
6.1

14.4 Packing group
II

14.5 Environmental hazards
N/A

14.6 Special precautions for user
No special precautions.

15.0 Regulatory information
Safety, health and environmental regulations/legislation specific for the substance or mixture
Not applicable.

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

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

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.