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

1.1 Product identifier

| Product name | $:$ Ytterbium fluoride, $99.99 \%$ |
| :--- | :--- |
| Product code | $:$ GX0009 |
| CAS number | $: 13760-80-0$ |

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 | $:+44(0) 1225667798$ |
| :--- | :--- | :--- | :--- | :--- |
|  | Unit 5 Leafield Way | Fax | $:+44(0) 2033978909$ |
|  | Corsham SN13 9SW | Email | $:$ info@glentham.com |
|  | United Kingdom | Web | $:$ www.glentham.com |

Emergency telephone number
Emergency telephone number: +44 (0) 1225667798 (09.00-17.00 GMT)
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
Acute Oral Tox. 3, Acute Derm. Tox. 3, Acute Inha. Tox. 3.
Label elements
Label elements under CLP

## Pictograms

## Signal words

Hazard statements
H301
H311
H331
Precautionary statements
P261
P280
$P 301+$ P330 + P331
P302 + P352
P304 + P340
P310
P403 + P233
Other hazards
PBT
This substance is not identified as a PBT substance.

### 3.0 Composition/information on ingredients

3.1 Substances

| Product name | $:$ Ytterbium fluoride, $99.99 \%$ | MW: 230.40 |
| :--- | :--- | :--- |
| CAS number | $:$ | $13760-80-0$ |

### 4.0 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. 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. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

## Inhalation

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 redness or whiteness of the skin in the area of exposure. Irritation or pain may occur at the site of contact. Absorption through the skin may be fatal.
Eye contact
There may be severe pain. The eyes may water profusely.

## Ingestion

There may be soreness and redness of the mouth and throat. There may be vomiting. Convulsions may occur. There may be loss of consciousness.

## Inhalation

There may be shortness of breath with a burning sensation in the throat. 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.
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.
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
Toxic. In combustion emits toxic fumes.
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
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.
Environmental precautions
Do not discharge into drains or rivers.
6.3 Methods and material for containment and cleaning up

Clean-up procedures
Absorb into dry earth or sand. 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.

## Handling and storage

7.1 Precautions for safe handling

Handling requirements
Ensure there is exhaust ventilation of the area. Avoid the formation or spread of dust in the air. Avoid direct contact with the substance.

Store in cool, well ventilated area. Keep container tightly closed. Avoid contact with water or humidity.

No data available.
8.0 Exposure controls/personal protection
8.1 Control parameters

Workplace exposure limits
8.2

Exposure controls
Engineering measures
Ensure there is exhaust ventilation of the area.
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
Impermeable gloves.
Eye protection
Safety glasses with side-shields. Ensure eye bath is to hand.
Skin protection
Protective clothing.
9.0 Physical and chemical properties
9.1 Information on basic physical and chemical properties

Physical Form:
Colour:
9.2 Other information

Not applicable.
10.0 Stability and reactivity
10.1 Reactivity
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

Heat.
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 redness or whiteness of the skin in the area of exposure. Irritation or pain may occur at the site of contact. Absorption through the skin may be fatal.
Eye contact
There may be severe pain. The eyes may water profusely.
Ingestion

There may be soreness and redness of the mouth and throat. There may be vomiting. Convulsions may occur. There may be loss of consciousness.

Inhalation
There may be shortness of breath with a burning sensation in the throat. 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

Biodegradable.
12.3 Bioaccumulative potential

No 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 Endocrine disrupting properties

Negligible ecotoxicity.

### 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

UN3288
14.2 UN proper shipping name

Toxic solid, inorganic, n.o.s. (Ytterbium fluoride, 99.99\%)
14.3 Transport hazard class(es)
6.1
14.4 Packing group

III
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
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.

