Safety Data Sheet

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

1.1 Product identifier

Product name : Zirconium dinitrate oxide hydrate, 99.99%
Product code : GX3925
CAS number : 14985-18-3

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
Unit 5 Leafield Way
Corsham SN13 9SW
United Kingdom

Telephone : +44 (0) 1225 667 798
Fax : +44 (0) 2033 978 909
Email : info@glentham.com
Web : www.glentham.com

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

Ox. Sol. 2, Skin Corr. 1B.

2.2 Label elements

Label elements under CLP

Pictograms



Signal words Danger

Hazard statements

H272 May intensify fire, oxidiser.
H314 Causes severe skin burns and eye damage.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P220 Keep/Store away from clothing/…/combustible materials.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
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.

2.3 Other hazards

PBT

This substance is not identified as a PBT substance.

3.0 Composition/information on ingredients

3.1 Substances

Product name : Zirconium dinitrate oxide hydrate, 99.99% MW: 231.23
CAS number : 14985-18-3 MF : $ZrO(NO_3)_2 \cdot xH_2O$

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. Consult a doctor.

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. Consult a doctor. 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 breathing becomes bubbly, have the casualty sit and provide oxygen if available.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact

There may be mild irritation at the site of contact. Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

Eye contact

There may be irritation and redness. Corneal burns may occur. May cause permanent damage.

Ingestion

Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose. 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.

Delayed / immediate effects

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

4.3 Indication of any immediate medical attention and special treatment needed

Immediate / special treatment

Eye bathing equipment should be available on the premises. Not applicable.

5.0 Fire-fighting measures

5.1 Extinguishing media

Water spray. Carbon dioxide. Alcohol resistant foam. Dry chemical powder. 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

Highly flammable. Corrosive. May form flammable / explosive dust-air mixture. 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

Refer to section 8 of SDS for personal protection details. Notify the police and fire brigade immediately. Eliminate all sources of ignition. 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.

6.2 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. Do not use equipment in clean-up procedure which may produce sparks. 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. Do not handle in a confined space. Avoid the formation or spread of dust in the air. Smoking is forbidden. Use non-sparking tools. Avoid direct contact with the substance.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Store in cool, well ventilated area. Keep away from sources of ignition. Keep container tightly closed. Avoid contact with water or humidity. Prevent the build up of electrostatic charge in the immediate area. Ensure lighting and electrical equipment are not a source of ignition.

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 lighting and electrical equipment are not a source of ignition.

Respiratory protection

Respiratory protective device with particle filter. Self- contained breathing apparatus must be available in case of emergency.

Hand protection

Protective gloves.

Eye protection

Safety glasses. Tightly fitting safety goggles. 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. Stable at room temperature.

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. Hot surfaces. Sources of ignition. Flames.

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. Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

Eye contact

There may be irritation and redness. Corneal burns may occur. May cause permanent damage.

Ingestion

Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose. 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.

Delayed / immediate effects

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

UN3085

14.2 UN proper shipping name

Oxidizing solid, corrosive, n.o.s. (Zirconium dinitrate oxide hydrate, 99.99%)

14.3 Transport hazard class(es)

5.1 (8)

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.