

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

##### 1.1 Product identifier

Product name : Silver(I) oxide, 99.99%  
Product code : GX5928  
CAS number : 20667-12-3

##### 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	: Glenthams Life Sciences Ltd	Telephone	: +44 (0) 1225 667 798
	Unit 5 Leafield Way	Fax	: +44 (0) 2033 978 909
	Corsham SN13 9SW	Email	: <a href="mailto:info@glenthams.com">info@glenthams.com</a>
	United Kingdom	Web	: <a href="http://www.glenthams.com">www.glenthams.com</a>

##### 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, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1.

##### 2.2 Label elements

Label elements under CLP

##### Pictograms



##### Signal words

Danger

##### Hazard statements

H272

May intensify fire, oxidiser.

H318

Causes serious eye damage.

H410

Very toxic to aquatic life with long lasting effects.

##### Precautionary statements

P210

Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P273

Avoid release to the environment.

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.

##### 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	: Silver(I) oxide, 99.99%	MW: 231.74
CAS number	: 20667-12-3	MF : Ag <sub>2</sub> O

#### 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. 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

There may be soreness and redness of the mouth and throat. 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 or polymer 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

Oxidising. Corrosive. 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. 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. Remove all incompatible materials as outlined in section 10 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. 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. 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. Avoid incompatible materials and conditions - see section 10 of SDS.

- 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. 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.
- 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. Organic materials.

## 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

There may be soreness and redness of the mouth and throat. 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

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 Endocrine disrupting properties

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

UN1479

### 14.2 UN proper shipping name

Oxidizing solid, n.o.s. (Silver(I) oxide, 99.99%)

### 14.3 Transport hazard class(es)

5.1

### 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.