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## SECTION 1: Identification

### 1.1 GHS Product identifier

**Product name** "mercurous oxide"

### 1.2 Other means of identification

**Product number** -

**Other names** Mercury oxide black;Mercurous oxide (Hg<sub>2</sub>O);EINECS 239-934-0

### 1.3 Recommended use of the chemical and restrictions on use

**Identified uses** Industrial and scientific research uses.

**Uses advised against** no data available

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## SECTION 2: Hazard identification

### 2.1 Classification of the substance or mixture

no data available

### 2.2 GHS label elements, including precautionary statements

**Pictogram(s)** no data available

**Signal word** no data available

**Hazard statement(s)** no data available

**Precautionary statement(s)**

**Prevention** no data available

**Response** no data available

**Storage** no data available

**Disposal** no data available

### 2.3 Other hazards which do not result in classification

no data available

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## SECTION 3: Composition/information on ingredients

### 3.1 Substances

| Chemical name     | Common names and synonyms | CAS number | EC number | Concentration |
|-------------------|---------------------------|------------|-----------|---------------|
| "mercurous oxide" | "mercurous oxide"         | 15829-53-5 | 239-934-0 | 100%          |

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## SECTION 4: First-aid measures

### 4.1 Description of necessary first-aid measures

#### If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

#### Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

#### Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

#### Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

### 4.2 Most important symptoms/effects, acute and delayed

no data available

### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

no data available

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## SECTION 5: Fire-fighting measures

### 5.1 Suitable extinguishing media

Use dry chemical, carbon dioxide or alcohol-resistant foam.

### 5.2 Specific hazards arising from the chemical

no data available

### 5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

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## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### 6.2 Environmental precautions

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up

Mercury spills should be cleaned up immediately by use of a special vacuum cleaner. Then the area should be washed with a dilute calcium sulfide solution. Small quantities of mercury can be picked up by mixing with copper metal granules. ... Mercury

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

### 7.2 Conditions for safe storage, including any incompatibilities

Protect from light.

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure limit values

|                  |                                                                                                                                                                                                                                                      |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Component</b> | "mercurous oxide"                                                                                                                                                                                                                                    |
| <b>CAS No.</b>   | 15829-53-5                                                                                                                                                                                                                                           |
|                  | Recommended Exposure Limit: 10 Hr Time-Weighted Avg: 0.05 mg/cu m, skin (Hg vapor). /Mercury [except (organo) alkyls] (as Hg)/<br>Recommended Exposure Limit: Ceiling Value: 0.1 mg/cu m, skin. /Mercury compounds [except (organo) alkyls] (as Hg)/ |

#### Biological limit values

no data available

### 8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

### 8.3 Individual protection measures, such as personal protective equipment (PPE)

#### Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

#### Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

#### Thermal hazards

no data available

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## SECTION 9: Physical and chemical properties and safety characteristics

|                                                                 |                                             |
|-----------------------------------------------------------------|---------------------------------------------|
| <b>Physical state</b>                                           | no data available                           |
| <b>Colour</b>                                                   | Black or brownish-black powder              |
| <b>Odour</b>                                                    | no data available                           |
| <b>Melting point/freezing point</b>                             | 100 deg C (decomposes to elemental mercury) |
| <b>Boiling point or initial boiling point and boiling range</b> | no data available                           |
| <b>Flammability</b>                                             | no data available                           |

|                                                           |                                    |
|-----------------------------------------------------------|------------------------------------|
| <b>Lower and upper explosion limit/flammability limit</b> | no data available                  |
| <b>Flash point</b>                                        | no data available                  |
| <b>Auto-ignition temperature</b>                          | no data available                  |
| <b>Decomposition temperature</b>                          | no data available                  |
| <b>pH</b>                                                 | no data available                  |
| <b>Kinematic viscosity</b>                                | no data available                  |
| <b>Solubility</b>                                         | Insol in water; sol in nitric acid |
| <b>Partition coefficient n-octanol/water</b>              | no data available                  |
| <b>Vapour pressure</b>                                    | no data available                  |
| <b>Density and/or relative density</b>                    | 9.8                                |
| <b>Relative vapour density</b>                            | no data available                  |
| <b>Particle characteristics</b>                           | no data available                  |

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

10 mg/cu m (as Hg) Mercury cmpd (except (organo) alkyl compounds (as Hg)

### 10.2 Chemical stability

no data available

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

Molten sodium or potassium decomposes mercurous oxide with slight explosion.

### 10.6 Hazardous decomposition products

When heated to decomposition ... emits highly toxic fumes of /mercury/.

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## SECTION 11: Toxicological information

### Acute toxicity

- Oral: no data available
- Inhalation: no data available
- Dermal: no data available

### Skin corrosion/irritation

no data available

### Serious eye damage/irritation

no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

A4: Not classifiable as a human carcinogen. Mercury, elemental and inorganic forms, as Hg

### Reproductive toxicity

no data available

### STOT-single exposure

no data available

### STOT-repeated exposure

no data available

### Aspiration hazard

no data available

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## SECTION 12: Ecological information

## 12.1 Toxicity

- Toxicity to fish: no data available
- Toxicity to daphnia and other aquatic invertebrates: no data available
- Toxicity to algae: no data available
- Toxicity to microorganisms: no data available

## 12.2 Persistence and degradability

no data available

## 12.3 Bioaccumulative potential

no data available

## 12.4 Mobility in soil

no data available

## 12.5 Other adverse effects

no data available

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## SECTION 13: Disposal considerations

### 13.1 Disposal methods

#### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

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## SECTION 14: Transport information

### 14.1 UN Number

ADR/RID: no data available

IMDG: no data available

IATA: no data available

### 14.2 UN Proper Shipping Name

ADR/RID: no data available

IMDG: no data available

IATA: no data available

### 14.3 Transport hazard class(es)

ADR/RID: no data available

IMDG: no data available

IATA: no data available

### 14.4 Packing group, if applicable

ADR/RID: no data available

IMDG: no data available

IATA: no data available

### 14.5 Environmental hazards

ADR/RID: No

IMDG: No

IATA: No

### 14.6 Special precautions for user

no data available

### 14.7 Transport in bulk according to IMO instruments

no data available

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## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations specific for the product in question

| Chemical name                                                          | Common names and synonyms | CAS number | EC number   |
|------------------------------------------------------------------------|---------------------------|------------|-------------|
| "mercurous oxide"                                                      | "mercurous oxide"         | 15829-53-5 | 239-934-0   |
| European Inventory of Existing Commercial Chemical Substances (EINECS) |                           |            | Listed.     |
| EC Inventory                                                           |                           |            | Listed.     |
| United States Toxic Substances Control Act (TSCA) Inventory            |                           |            | Listed.     |
| China Catalog of Hazardous chemicals 2015                              |                           |            | Listed.     |
| New Zealand Inventory of Chemicals (NZIoC)                             |                           |            | Not Listed. |
| Philippines Inventory of Chemicals and Chemical Substances (PICCS)     |                           |            | Listed.     |
| Vietnam National Chemical Inventory                                    |                           |            | Not Listed. |

