

## **MATERIAL SAFETY DATA SHEET (SDS/MSDS)**

**BISMUTH OXIDE 98% EXTRA PURE**  
CAS-No.: 1304-76-3  
Product Code: 00431  
Molecular Formula:  $\text{Bi}_2\text{O}_3$

**MATERIAL SAFETY DATA SHEET (SDS/MSDS)****BISMUTH OXIDE 98% EXTRA PURE****CAS-No.: 1304-76-3****SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product form : Substance  
Trade name : Bismuth Oxide 98% Extra Pure  
EC no : 215-134-7  
CAS No : 1304-76-3  
Synonyms : Dibismuth trioxide

**1.2. Relevant identified uses of the substance or mixture and uses advised against****1.2.1. Relevant identified uses**

Industrial/Professional use spec : Industrial For professional use only

**1.2.2. Uses advised against**

No additional information available

**1.3. Details of the supplier of the safety data sheet**

Company : Chemnovo Synthesis Pvt Ltd.  
N-226 Near Kumbhavali Naka  
Tarapur MIDC, Boisar-401 506  
Palghar, Maharashtra  
Telephone : +91 7400096089  
Email: export@chemnovo.in

**1.4. Emergency telephone number**

Emergency number : + 91 7400096089 (9:00am - 6:00 pm)

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture**

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, H315

Category 2

Serious eye damage/eye H319

irritation, Category 2

Specific target organ H335

toxicity – Single

exposure, Category 3,

Respiratory tract irritation

Full text of H statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

**2.2. Label elements**

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP)	:	Warning
Hazard statements (CLP)	:	H315 – Causes skin irritation. H319 – Causes serious eye irritation. H335 – May cause respiratory irritation.
Precautionary statements (CLP)	:	P261 – Avoid breathing vapours, dust, fume, gas. 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**

No additional information available

**SECTION 3: Composition/information on ingredients****3.1. Substance**

Name	:	Bismuth Oxide 98% Extra Pure
CAS No	:	1304-76-3
EC no	:	215-134-7

Full text of R- and H-statements: see section 16

**3.2. Mixture**

Not applicable

**SECTION 4: First aid measures****4.1. Description of first aid measures**

First-aid measures after inhalation	:	Assure fresh air breathing. Allow the victim to rest.
First-aid measures after skin contact	:	Wash with plenty of water/.... Get immediate medical advice/attention.
First-aid measures after eye contact	:	Rinse immediately with plenty of water.
First-aid measures after ingestion	:	Rinse mouth. Do not induce vomiting.

**4.2. Most important symptoms and effects, both acute and delayed**

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes eye irritation.  
Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

**4.3. Indication of any immediate medical attention and special treatment needed**

No additional information available

**SECTION 5: Firefighting measures****5.1. Extinguishing media**

Suitable extinguishing media : Carbon dioxide. Dry powder. Foam. Water spray  
Unsuitable extinguishing media : Do not use a heavy water stream.

**5.2. Special hazards arising from the substance or mixture**

No additional information available

**5.3. Advice for firefighter**

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****6.1.1. For non-emergency personnel**

Emergency procedures : Evacuate unnecessary personnel.

**6.1.2. For emergency responders**

Protective equipment : Use personal protective equipment as required.  
Emergency procedures : Ventilate area.

**6.2. Environmental precautions**

Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up**

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers.

**6.4. Reference to other sections**

No additional information available

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

Precautions for safe handling : Avoid contact with skin and eyes. Do not breathe vapours.

**7.2. Conditions for safe storage, including any incompatibilities**

Storage conditions : Store in a well-ventilated place. Keep container tightly closed.

**7.3. Specific end use(s)**

No additional information available

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

No additional information available

**8.2. Exposure controls**

Hand protection	:	Protective gloves
Eye protection	:	Chemical goggles or safety glasses
Skin and body protection	:	Wear suitable protective clothing
Respiratory protection	:	[In case of inadequate ventilation] wear respiratory protection.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state	:	Solid
Colour	:	Yellow powder.
Odour	:	odourless.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	825 °C
Freezing point	:	No data available
Boiling point	:	1890 °C
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	8.9 g/cm <sup>3</sup>
Solubility	:	Water: Insoluble in water
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available

**9.2. Other information**

No additional information available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No additional information available

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

No additional information available

**10.4. Conditions to avoid**

No additional information available

**10.5. Incompatible materials**

No additional information available

**10.6. Hazardous decomposition products**

No additional information available

**SECTION 11: Toxicological information****11.1. Information on toxicological effects**

Acute toxicity	:	Not classified
Skin corrosion/irritation	:	Causes skin irritation.
Serious eye damage/irritation	:	Causes serious eye irritation.
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
STOT-single exposure	:	May cause respiratory irritation.
STOT-repeated exposure	:	Not classified
Aspiration hazard	:	Not classified

**SECTION 12: Ecological information****12.1. Toxicity**

No additional information available

**12.2. Persistence and degradability**

No additional information available

**12.3. Bioaccumulative potential**

No additional information available

**12.4. Mobility in soil**

No additional information available

**12.5. Results of PBT and vPvB assessment**

No additional information available

**12.6. Other adverse effects**

No additional information available

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

No additional information available

**SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / AND

**14.1. UN number**

UN-No. (ADR)	:	Not applicable
UN-No. (IMDG)	:	Not applicable
UN-No.(IATA)	:	Not applicable
UN-No.(AND)	:	Not applicable
UN-No. (RID)	:	Not applicable

**14.2. UN proper shipping name**

Proper Shipping Name (ADR)	:	Not applicable
Proper Shipping Name (IMDG)	:	Not applicable
Proper Shipping Name (IATA)	:	Not applicable
Proper Shipping Name (ADN)	:	Not applicable
Proper Shipping Name (RID)	:	Not applicable

**14.3. Transport hazard class(es)**

ADR	
Transport hazard class(es) (ADR)	:
IMDG	
Transport hazard class(es) (IMDG)	:
IATA	
Transport hazard class(es) (IATA)	:
AND	
Transport hazard class(es) (ADN)	:
RID	
Transport hazard class(es) (RID)	:

**14.4. Packing group**

Packing group (ADR)	:	Not applicable
Packing group (IMDG)	:	Not applicable
Packing group (IATA)	:	Not applicable
Packing group (ADN)	:	Not applicable
Packing group (RID)	:	Not applicable

**14.5. Environmental hazards**

Dangerous for the environment	:	No
Marine pollutant	:	No
Other information	:	No supplementary information available

**14.6. Special precautions for user**

- Overland transport

No data available

- Transport by sea

No data available

- Air transport  
No data available
- Inland waterway transport  
No data available
- Rail transport  
No data available

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1. EU-Regulations**

No REACH Annex XVII restrictions

Bismuth Oxide 98% Extra Pure is not on the REACH Candidate List

Bismuth Oxide 98% Extra Pure is not on the REACH Annex XIV List

**15.1.2. National regulations****Germany**

Reference to AwSV : Water hazard class (WGK) nwg, Non-hazardous to water  
(Classification according to AwSV; ID No. 3289)

12th Ordinance Implementing the Federal  
Immission Control Act - 12.BImSchV :

Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

**Netherlands**

SZW-lijst van kankerverwekkende stoffen

The substance is not listed

SZW-lijst van mutagene stoffen :

The substance is not listed

NIET-limitatieve lijst van voor de  
voortplanting giftige stoffen – Borstvoeding

The substance is not listed

NIET-limitatieve lijst van voor de  
voortplanting giftige stoffen –

The substance is not listed

Vruchtbaarheid

NIET-limitatieve lijst van voor de  
voortplanting giftige stoffen – Ontwikkeling

The substance is not listed

**Denmark**

Recommendations Danish Regulation :

Young people below the age of 18 years are not allowed to use the product

**15.2. Chemical safety assessment**

No additional information available

**SECTION 16: Other information**

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Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

**Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Chemnovo Synthesis Pvt Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.chemnovo.in](http://www.chemnovo.in) for additional terms and conditions of sale.

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