



Material Safety Data Sheet Bismuth trioxide

Edition: 03/08/2018

1.1) Identification of substance/preparation and of the company undertaking

Material	Bismuth trioxide
CAS No	1304-76-3
REACH registration No. :	Exempt
Company	Inoxia Ltd 45.7 Dunsfold Park Stovolds Hill Cranleigh Surrey GU6 8TB Tel: 02032 909990 safety@inoxia.co.uk www.inoxia.co.uk

2) Hazard Identification

Potential Acute Health Effects: Slightly hazardous in case of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects: CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

3) Composition

Name	CAS No.	EC-No.	%by weight
Bismuth trioxide	1304-76-3	215-134-7	100

Toxicological Data on Ingredients: Not applicable

4) First Aid Measures

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes

with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Skin Contact: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before

reuse. Get medical attention.

Serious Skin Contact: Not available.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

5) Fire Fighting

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances: Risks of explosion of the product in

presence of mechanical impact: Not available. Risks of explosion of the product in presence of

Static discharge: Not available.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

6) Accidental Release

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill: Use a shovel to put the material into a convenient waste disposal container.

Finish

cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

7) Handling/Storage

Precautions: Do not ingest. Do not breathe dust. If ingested, seek medical advice immediately and

show the container or the label.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

8) Exposure Controls

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Safety glasses. Lab coat.

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Boots. Gloves. Suggested

protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

9) Physical/Chemical Properties

Physical state and appearance: Solid. (Crystalline solid.)

Odor: Not available.

Taste: Not available.

Molecular Weight: 466 g/mole

Color: Yellowish.

pH (1% soln/water): Not applicable.

Boiling Point: 1890°C (3434°F)

Melting Point: 824°C (1515.2°F)

Critical Temperature: Not available.

Specific Gravity: 9.32 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: Insoluble in cold water.

10) Stability/Reactivity

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Not available.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

11) Toxicological Information

Routes of Entry: Not available.

Toxicity to Animals: Acute oral toxicity (LD50): 5000 mg/kg [Rat].

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans: Slightly hazardous in case of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Due to the presence of dark line on gums,

chronic bismuth toxicity may complicate diagnosis of chronic lead toxicity.

Special Remarks on other Toxic Effects on Humans: Not available.

12) Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely.

However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are as toxic as the original product.

Special Remarks on the Products of Biodegradation: Not available.

13) Disposal Consideration

Waste Disposal:

14) Transport Information

DOT Classification: Not a DOT controlled material (United States).

ADR Classification: Not an ADR controlled material

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

15) Regulatory Information

Federal and State Regulations: TSCA 8(b) inventory: Bismuth trioxide

Other Regulations: Not available.

Other Classifications:

DSCL (EEC): This product is not classified according to the EU regulations.

Health Hazard: 1

Fire Hazard: 0

Reactivity:

Personal Protection: a

National Fire Protection Association :

Health: 1

Flammability: 0

Reactivity: 0

Specific hazard:

Protective Equipment: Not applicable. Lab coat. Not applicable. Safety glasses.

16) Other Information

Indication of changes: according to Regulation (EC) No. 1907/2006 (REACH) with it's amendment Regulation (EC) No 453/20101

Data sources: Reach dossier.

Abbreviations and acronyms:

ADN: European Agreement concerning international carriage of Dangerous goods by Inland waterways

ADR: European Agreement concerning international carriage of Dangerous goods by Road

AF: Assessment factor

BCF: Bioconcentration factor

Bw: Body weight

CAS: Chemical Abstracts Service

CLP: Classification, labelling, packaging

CSR: Chemical Safety Report

DMEL: Derived maximum effect level

DNEL: Derivative No effect Level

EC: European Community

ELV: Emission limit values

EN: European Norm

EUH: European Hazard Statement

EWC: European Waste catalogue

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

IMDG: International Maritime Dangerous Goods

LC50: Median lethal concentration

LD50: Median lethal dose

NOAEL: No-observed-adverse-effect-level

NOEC: No observed effect concentration

OEL: Operator exposure level

PBT: Persistent, bioaccumulative, Toxic

PEC: Predicted effect level

PNEC: Predicted No effect Concentration

REACH: Registration, evaluation and autorisation of chemicals

RID: Regulations concerning the international carriage of dangerous goods by rail

STEL: Short Term Exposure Limit

TWA: Time weighted average

vPvB: Very persistent, very bioaccumulative.

Training advice: None.

Full text of R-, H-, P- and EUH-phrases:

H302	Harmful if swallowed.
H332	Harmful if inhaled.
H351	Suspected of causing cancer

H360Df	May damage fertility or the unborn child .
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
R20/22	Harmful by inhalation and if swallowed
R33	Danger of cumulative effects
R40	Limited evidence of a carcinogenic effect.
R50	Very toxic to aquatic organisms
R53	May cause long-term adverse effects in the aquatic environment
R61	May cause harm to the unborn child
R62	Possible risk of impaired fertility
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P281	Use personal protective equipment as required.
P308 + P313	IF exposed or concerned: Get medical advice/attention
P501	Dispose of contents/containers in accordance with all local. Regional. National and international regulations
Xn	Harmful
N	Dangerous for the environment

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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