OXFORD LAB FINE CHEM LLP
ISO 9001-2008 Certified Company

Regd Office: Unit no 12, 1st Floor,
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Oxford
Range of
Laboratory Chemicals

MATERIAL SAFETY DATA SHEET

BISMUTH SUBNITRATE

Extra Pure

MSDS CAS: -1304-85-4

Section 1: Chemical Product andCompany Identification

Section 1: Chemical Product

Product Name:BISMUTH SUBNITRATE Extra Pure

CAS NO: -1304-85-4

C.I. No.: Not available.

Synonym:Bismuth Nitrate, basic; Bismuth Oxynitrate

Chemical Name:Bismuth Subnitrate

Chemical Formula: $Bi_5O(OH)_9(NO_3)_4$

Brand: OXFORD

Details Of The Supplier Of The Safety Data Sheet:

Company identification: OXFORD LAB FINE CHEM LLP
Unit. No. 12, 1st Floor, Neminath Industrial Estate No. 6,
Navghar, Vasai (East). Palghar - 401 210.
Mumbai, Maharashtra, INDIA.
Tel: 91-250-2390989
Tel/Fax: 91-250-2390032

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS NO	% by Weight
BISMUTH SUBNITRATE	1304-85-4	≤100%

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Section 3: Hazards Identification

Potential Acute Health Effects:

Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Prolonged exposure may result in skin burns and ulcerations. Over-exposure by inhalation may cause respiratory irritation.

Potential Chronic Health Effects:

Hazardous in case of skin contact (irritant), of ingestion. CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to kidneys, liver. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 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.

Skin Contact:

In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

Inhalation:

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

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. Seek medical attention.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

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Section 5: Fire and Explosion Data

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: Fire risk near organic materials
Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.
Large Spill:
Oxidizing material. Stop leak if without risk. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal.

Section 7: Handling and Storage

Precautions:
Keep away from heat. Keep away from sources of ignition. Keep away from combustible material.. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes.
Storage:
Keep container tightly closed. Keep container in a cool, well-ventilated area. Separate from acids, alkalies, reducing agents and combustibles. See NFPA 43A, Code for the Storage of Liquid and Solid Oxidizers. Do not store above 25°C (77°F).

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Section 8: Exposure Controls/Personal Protection

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:
Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

Section 9: Physical and Chemical Properties

Physical state and appearance	**: Solid.**
Odor	**: Odourless**
Taste	**:Tasteless.**
Molecular Weight	**: 1461.99 g/mole**
Color	**: White.**
Ph	**: 3.2 at 20°C**
Boiling Point	**: Decomposition temperature: 260°C (500°F)**
Melting Point	**: 260 °C (Decomposes)**
Critical Temperature	**: Not available.**
Density	**: 4.928 g/cm^3**
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	**:Water: Insoluble in water**

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Section 10: Stability and Reactivity Data

Stability: The product is stable.
Instability Temperature: Not available.
Conditions of Instability: Incompatible materials
Incompatibility with various substances: Not available.
Corrosivity: Not available.
Special Remarks on Reactivity: Incompatible with alkaline bicarbonates, soluble iodides, gallic acid, calomel, salicylic acid, tannin, and sulfur.
Special Remarks on Corrosivity: Not available.
Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.
Toxicity to Animals:
LD50: Not available. LC50: Not available.
Chronic Effects on Humans: May cause damage to the following organs: kidneys, liver.
Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of ingestion, of inhalation.
Special Remarks on Toxicity to Animals:
Lowest Published Lethal Dose: LDL [Human infant] - Route: Oral; Dose: 1000 mg/kg.
Special Remarks on Chronic Effects on Humans:
Passes through the placental barrier in human. 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:
Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: May cause eye irritation. May cause temporary foggy vision. Inhalation: May cause respiratory tract irritation. Ingestion: May cause gastrointestinal (digestive) tract irritation with abdominal pain, diarrhea. May affect behavior/central nervous system (ataxia, tremors, convulsions, irregular myoclonic jerks, mental confusion, disordered gait, dysarthria), and blood (methemoglobinemia). Chronic Potential Health Effects: Skin: Chronic or prolonged skin contact may cause dermatitis. Ingestion: Chronic or prolonged ingestion may cause weakness, rheumatic pain, diarrhea, fever, metal line on gums, foul breath, gingivitis. It may also affect metabolism (decreased appetite), liver (jaundice), kidneys. The kidneys are the sight os highest concentration, with the liver being considerably lower. Oral administration produces poisoning through the formation of nitrites.

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Section 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 product itself and its products of degradation are not toxic.
Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

14.1. Land transport (ADR-RID)

Proper shipping name	: NITRATES, INORGANIC, N.O.S.
UN N°	: 1477
H.I. nr	: 50
ADR – Class	: 5.1
Labelling - Transport	: UN 1477 NITRATES, INORGANIC, N.O.S. (BISMUTH SUBNITRATE), 5.1, II, (E)
ADR - Group	: II

14.2. Sea transport (IMDG) [English only]

Proper shipping name	: NITRATES, INORGANIC, N.O.S.
UN N°	: 1477
IMO-IMDG - Class or division	: UN 1477 NITRATES, INORGANIC, N.O.S., 5.1, II
IMO-IMDG - Packing group	: II

Section 14: Transport Information (Continued)

14.3. Air transport (ICAO-IATA) [English only]

Proper shipping name : **NITRATES, INORGANIC, N.O.S.**
UN N° : **1477**
IATA - Class or division : **UN 1477 Nitrates, inorganic, n.o.s. (BISMUTH SUBNITRATE), 5.1, II**
IATA - Packing group : **II**

Section 15: Other Regulatory Information

Federal and State Regulations:
TSCA 8(b) inventory: Bismuth subnitrate CERCLA: Hazardous substances.: Bismuth subnitrate
Other Regulations:
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.
Other Classifications:
WHMIS (Canada): **Not controlled under WHMIS (Canada).**
DSCL (EEC):
R8- Contact with combustible material may cause fire. R36/38- Irritating to eyes and skin. S2- Keep out of the reach of children. S46- If swallowed, seek medical advice immediately and show this container or label.
HMIS (U.S.A.):
Health Hazard: **2**
Fire Hazard: **0**
Reactivity:0
Personal Protection: **E**
National Fire Protection Association (U.S.A.):
Health:2
Flammability:0
Reactivity:0
Specific hazard:
Protective Equipment:
Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

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Section 16 - Additional Information

References: Not available.

Other Special Considerations: Not available.

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