

Address: National industry, Pipodra GIDC, Surat-394110, Gujarat, India.

Email: cynorlaboratories@gmail.com Mobile No.: +91 8799070507

## MATERIAL SAFETY DATA SHEET

|              |                    |
|--------------|--------------------|
| Product Name | BISMUTH SUBNITRATE |
|--------------|--------------------|

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

#### 1.1 Product identifier

Trade name : BISMUTH SUBNITRATE

Product code :B0121

Identification of the product: BISMUTH SUBNITRATE

CAS No : 1304-85-4

#### 1.2 Relevant identified uses of the substance or mixture and uses advised

againstUse: Industrial. For professional use only.

#### 1.3 Details of the supplier of the safety data sheet

Company identification: CYNOR

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### 2. Hazards identification -DSD

#### 2.1 Classification of the substance or mixture

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

Oxidising Solids, H272

Category 2

Skin corrosion/irritation, H315

Category 2

Serious eye damage/eye

irritation, H319

Category 2

Specific target organotoxicity —

Single exposure, H335

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]

Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2 Label element

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Extra labelling to display  
Extra classification(s) to display

Symbol(s) : O :

OxidizingXn: Harmful



**R Phrase(s)** : R8: Contact with combustible material may cause fire.

R36/37/38: Irritating to eyes, respiratory system and skin.

**S Phrase(s)** : S17: Keep away from combustible material.

S26: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advise.

S36: Wear suitable protective clothing.

**Hazard pictograms**



**Signal word** : Danger

**Hazard statements** : H272 - May intensify fire; oxidiser.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H335 - May cause respiratory irritation.

Precautionary statements (CLP) : P220 - Keep/Store away from clothing, combustible materials.

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

**3. Composition/information on ingredients**

**Substances:** BISMUTH SUBNITRATE AR

CAS-No. : 1304-85-4

Substance.

Contains no other components or impurities which will influence the classification of the product.

**4. First aid measures**

**4.1 Description of first aid measures**

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

First-aid measures after skin contact : Wash with plenty of water/.... Wash contaminated clothing before reuse. Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Get medical advice/attention.

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

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

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

Treat symptomatically.

**5. Fire-fighting 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 Specific hazards arising from the substance or mixture**



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Fire hazard : May intensify fire; oxidiser.

### 5.3 Advice for fire-fighters

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

## 6. Accidental release measures

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

#### For emergency responders:

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

#### For non-emergency personnel:

Emergency procedure: Evacuate unnecessary personnel

### 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

## 7. Handling and storage

### 7.1 Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Use only outdoors or in a well-ventilated area. Do not breathe vapours.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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

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

### 7.3 Specific end use(s)

No additional information available

## 8. Exposure controls/personal protection

### 8.1 Control parameter

No additional information available

### 8.2 Exposure control

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.

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**Odour:** No data available.

**Odour threshold:** No data available.

**pH value:** Not data available

**Relative evaporation rate (butylacetate=1):** No data available



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**Melting point [°C]:** 500° C

**Freezing point:** No data available

**Boiling point:** No data available

**Flash point:** No data available

**Decomposition point [°C]:** No data available

**Auto-ignition temperature [°C]:** No data available

**Flammability (solid, gas):** No data available

**Vapour pressure:** No data available

**Relative pressure density at 20° C:** No data available

**Relative density:** No data available

**Density:** 4.928 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

## 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

Moisture. Direct sunlight. Overheating

### 10.5 Incompatible materials

No additional information available

### 10.6 Hazardous decomposition products

No additional information available

## 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.



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STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

## **12. Ecological information**

### **12.1 Toxicity**

No additional information available.

### **12.2 Persistence – 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

## **13. Disposal considerations**

### **13.1 Waste treatment methods**

No additional information available.

## **14. Transport information**

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

### **14.1 UN number**

UN-No. (ADR) : 1477

UN-No. (IMDG) : 1477

UN-No. (IATA) : 1477

UN-No. (ADN) : 1477

UN-No. (RID) : 1477

### **14.2 UN proper shipping name**

Proper Shipping Name (ADR) : NITRATES, INORGANIC, N.O.S.

Proper Shipping Name (IMDG) : NITRATES, INORGANIC, N.O.S.

Proper Shipping Name (IATA) : Nitrates, inorganic, n.o.s.

Proper Shipping Name (ADN) : NITRATES, INORGANIC, N.O.S.

Proper Shipping Name (RID) : NITRATES, INORGANIC, N.O.S.

Transport document description (ADR) : UN 1477 NITRATES, INORGANIC, N.O.S.,5.1, II, (E)

Transport document description (IMDG) : UN 1477 NITRATES, INORGANIC, N.O.S.,5.1, II

Transport document description (IATA) : UN 1477 Nitrates, inorganic, n.o.s., 5.1, II

Transport document description (ADN) : UN 1477 NITRATES, INORGANIC, N.O.S.,5.1, II

Transport document description (RID) : UN 1477 NITRATES, INORGANIC, N.O.S.,5.1, II

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

**ADR-** Transport hazard class(es) (ADR) : 5.1

Danger labels (ADR) : 5.1

**IMDG-** Transport hazard class(es) (IMDG) : 5.1

Danger labels (IMDG) : 5.1

**IATA-** Transport hazard class(es) (IATA) : 5.1



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Hazard labels (IATA) : 5.1

ADN- Transport hazard class(es) (ADN) : 5.1

Danger labels (ADN) : 5.1

RID- Transport hazard class(es) (RID) : 5.1

Danger labels (RID) : 5.1

#### 14.4 Packing group

Packing group (ADR) : II

Packing group (IMDG) : II

Packing group (IATA) : II

Packing group (ADN) : II

Packing group (RID) : II

#### 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- Classification code (ADR) : O2

Special provisions (ADR) : 511

Limited quantities (ADR) : 1kg

Excepted quantities (ADR) : E2

Packing instructions (ADR) : P002, IBC08

Special packing provisions (ADR) : B4 Mixed

packing provisions (ADR) : MP10

Portable tank and bulk container instructions (ADR) : T3

Portable tank and bulk container special

provisions (ADR): TP33 Tank

code (ADR) : SGAN

Tank special provisions (ADR) : TU3

Vehicle for tank carriage : AT Transport

category (ADR) : 2

Special provisions for carriage – Packages (ADR): V11

Special provisions for carriage - Loading,

unloading and handling (ADR): CV24

Hazard identification number (Kemler No.) : 50

Orange plates :

Tunnel restriction code (ADR) : EEAC

code : 1Y

#### Transport by sea

Limited quantities (IMDG) : 1 kg

Excepted quantities (IMDG) : E2

Packing instructions (IMDG) : P002

IBC packing instructions (IMDG) : IBC08

IBC special provisions (IMDG) : B21, B4

Tank instructions (IMDG) : T3

Tank special provisions (IMDG) : TP33

EmS-No. (Fire) : F-A

EmS-No. (Spillage) : S-Q Stowage

category (IMDG) : A



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Segregation (IMDG) : SG38, SG49

Properties and observations (IMDG) : Solids. Solid mixtures with combustible material are readily ignited and may burn fiercely. Harmful if swallowed.

MFAG-No : 140

**Air transport**

PCA Excepted quantities (IATA) : E2

PCA Limited quantities (IATA) : Y544

PCA limited quantity max net quantity (IATA) : 2.5kg

PCA packing instructions (IATA) : 558

PCA max net quantity (IATA) : 5kg

CAO packing instructions (IATA) : 562

CAO max net quantity (IATA) : 25kg

Special provisions (IATA) : A3, A803

ERG code (IATA) : 5L

**Inland waterway transport**

Classification code (ADN) : O2

Special provisions (ADN) : 511

Limited quantities (ADN) : 1 kg

Excepted quantities (ADN) : E2

Equipment required (ADN) : PP

Number of blue cones/lights (ADN) : 0

**Rail transport**

Classification code (RID) : O2

Special provisions (RID) : 511

Excepted quantities (RID) : E2

Packing instructions (RID) : P002, IBC08

Special packing provisions (RID) : B4

Mixed packing provisions (RID) : MP10

Portable tank and bulk container instructions (RID) : T3

Portable tank and bulk container special provisions (RID) : TP33

Tank codes for RID tanks (RID) : SGAN

Special provisions for RID tanks (RID) : TU3

Transport category (RID) : 2

Special provisions for carriage – Packages (RID) : W11

Special provisions for carriage - Loading, unloading and handling (RID) : CW24

Colis express (express parcels) (RID) : CE10

Hazard identification number (RID) : 50

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

Not applicable

**15. Regulatory information**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

**15.1.1 EU-Regulations**

Contains no REACH substances with Annex XVII restrictions



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Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

#### **15.1.2 National regulations**

##### **Germany**

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 – Vruchtbaarheid :

The substance is not listed

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

#### **16. Other information**

**Abbreviations and acronyms** : PBT: persistent, bioaccumulative and toxic.vPvB: very persistent and very bioaccumulative

**Sources of key data used** : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

**Further information** : None.

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#### **End of document**

**Prepared by: CYNOR**



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