SAFETY DATA SHEET

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No.: B 11317

Product Name: **BISMUTH OXIDE 99 %**

Manufacturer / supplier identification

Company	:	NICE CHEMICALS PVT.LTD. , Cochin , India Tel - 0484 2800212 , 2802755
Contact for Information	:	Tel . No. – 0484 2802536 Fax : 0484 2802483
Emergency Telephone No.	:	0484 2801583 Tele fax No. : 0484 2802483

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2. COMPOSITION / INFORMATION ON INGREDIENTS

CAS-No	:	1304-76-3
EC –No.	:	215-134-7
Molar mass	:	465.96 g/mol
Molecular formula	:	Bi_2O_3

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3. HAZARDS IDENTIFICATION

No hazardous product as specified in Directive 67/548/EEC.

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4. FIRST AID MEASURES

After inhalation : Fresh air.

After skin contact : wash off with plenty of water.

After eye contact : Rinse out with plenty of water with the eyelid held wide open.

After swallowing : Make victim drink plenty of water, induce vomiting, summon doctor.

5. FIRE – FIGHTING MEASURES

Suitable extinguishing media : In adaption to materials stored in the immediate nighbourhood.

Special risks : Non-combustible.

Other information : Prevent fire-fighting water from entering surface water or ground water.

6. ACCIDENTAL RELEASE MEASURES

Procedures for cleaning/absorption : Take up dry. Forward for disposal. Clean up affected area.

Person-related precautionary measures : Avoid generation of dusts; do not inhale dusts.

Environmental-protection measures : Do not allow to enter sewerage system.

7. HANDLING AND STORAGE

Handling : No further requirements.

Storage : Tightly closed. Dry. Storage temperature : No restrictions.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment :

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

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Respiratory protection : required when dust are generated.

Eye protection : required

Hand protection : In full contact : Glove material : Nitrile rubber

Layer thickness : 0.11 mm Breakthrough time : > 480 min

In splash contact : Glove material : Nitrile rubber

Layer thickness : 0.11 mm Breakthrough time : > 480 min

The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374, for example KCL 740 Dermatril, 740 dermatril.

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet and supplied by us as well as to the purpose specified by us. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 374 please contact the supplier.

Industrial hygiene : Change contaminated clothing. Wash hands after working with substance.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	solid
Colour	:	Light yellow
Odour	:	odourless
PH value at 50 g/l H_2O (20^0C)	:	Not available
Melting temperature	:	817 ^0C
Boiling temperature	:	1890 ^0C
Ignition temperature	:	Not available
Flash point	:	Not available

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Explosion limits	Lower	:	Not available
	Upper	:	Not available
Vapour pressure		:	low
Density(20^0C)		:	8.93 g/ cm^3
Bulk density		:	~ 1000 Kg/m^3
Solubility in water(20^oC)		:	Almost insoluble

10. STABILITY AND REACTIVITY

Conditions to be avoided : No information available

Substance to be avoided : No information available

Hazardous decomposition products : No information available.

11. TOXICOLOGICAL INFORMATION

Acute toxicity : LD_{50} (oral, rat) : 5000 mg/kg.

Further toxicological information : Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Other notes : The following applies to bismuth compounds in general; only slightly absorbable via the gastrointestinal tract.

Further data : The product should be handled with the care usual when dealing with chemicals.

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12. ECOLOGICAL INFORMATION

Ecotoxic effects : Quantitative data on the ecological effect of this product are not available.

Biological degradation : Methods for the determination of biodegradability are not applicable to inorganic substances.

Further ecological data : The following applies to bismuth compounds in general : Nothing is known about a general risk involved with Bi and its compounds. In water, dissolved bismuth compounds are rapidly converted into slightly soluble compounds, so that to date no appreciable damage to the environment has been observed. The mean concentration river water is approx. 50 ppt Bi, in terrestrial plants approx. 60 ppb Bi has been measured.

No ecological problems are to be expected when the product is handled and used with due care and attention.

13. DISPOSAL METHOD

Product

There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC Member countries through that you corresponding laws and regulations. We recommend contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

Packaging

Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

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14. TRANSPORT INFORMATION : No subject to transport regulations

15. REGULATORY INFORMATION

Labelling according to EC Directives

Symbol: ----------

R-phrases: ----------

S-phrases: ----------

16. OTHER INFORMATION

Reason for alteration :

Chapter 8 : personnal protective equipment.

Chapter 1 : Change in product name.

General update.

The information contained here in is based on the present state of our knowledge.
It characterizes the product with regard to the appropriate safety precautions.
It does not represent a guarantee of the properties of the product.