



SAFETY DATA SHEET

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No. : B 10729
Product Name : Barium Nitrate

Manufacturer / supplier identification

Company : NICE Chemicals (P) Ltd. , Cochin , India
Tel - 0484 2800212 , 2802755

Contact For Information : Tel . No. – 0484 2802536 Fax : 0484 2802483
Emergency Telephone No. : 0484 2801583 Telefax No. : 0484 2802483

2. COMPOSITION / INFORMATION ON INGREDIENTS

CAS-No : 10022-31-8
Ec-Index No. : 056-002-00-7
EC-No. : 233-020-5
Molecular Formula : BaN_2O_6

3. HAZARDS IDENTIFICATION : Harmful by inhalation and if swallowed.

4. FIRST AID MEASURES

After inhalation : fresh air. Consult doctor if feeling unwell
After skin contact: wash off with plenty of water .Remove contaminated clothing
After eye contact: rinse out with plenty of water if pain persists consult an eye specialist
After swallowing: Make victim drink plenty of water.
Induce vomiting .consult doctor if feeling unwell.

5. FIRE – FIGHTING MEASURES

Suitable extinguishing media : In adaption to materials available in immediate neighbourhood



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Special risks: Non combustible. Ambient fire may liberate hazardous vapours.
The following may develop in the event of fire: nitrogen oxides

Other information :

Prevent fire fighting water from entering surface water or ground water.

Special protective equipment for fire fighting : Do not stay in dangerous zone without self contained breathing apparatus.

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 sewage system.

7. HANDLING AND STORAGE

Handling : No further requirements .

Storage : Tightly closed . Dry .

In a well ventilated place . Keep away from sources of ignition and heat.

Storage temperature : No restrictions.

Notes for common storage: Away from combustible substances

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment

Respiratory protection : required when dusts are generated .

Eye protection : required

Hand protection : not required

Industrial hygiene : Change contaminated

clothing . Application of skin protective barrier

cream recommended . Wash hands after working

with substance .



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9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	solid
Colour	:	white
Odour	:	odourless
PH value at 50 g/l H ₂ O (20 ⁰ C)	:	~ 5.2
Melting temperature	:	~ 592-595 ⁰ C
Boiling temperature	:	Not available
Ignition temperature	:	Not available
Flash point	:	Not available
Explosion limits lower	:	Not available
Upper	:	Not available
Relative vapour density	:	Not available
Density (20 ⁰ C)	:	3.2 g/cm ³
Solubility in water (20 ⁰ C)	:	90g/l
Ethanol (20 ⁰ C)	:	almost insoluble

10. STABILITY AND REACTIVITY

Conditions to be avoided : No information available.

Substance to be avoided : Combustible substances, metals in powder form, sulfur, polyvinyl chloride, calcium silicide, charcoal, aluminium in powder form, magnesium in powder form

Hazardous decomposition products : nitrous gases, oxygen.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD₅₀ (oral, rat): 355 mg/Kg

Further toxicological information

Skin irritation test (rabbit): slight irritations

Eye irritation test (rabbit): severe irritations



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Additional notes: The following applies to soluble barium compounds in general: after swallowing mucosal irritation, nausea, salivation, vomiting, dizziness, pain, colics and diarrhoea. Systemic effects include: cardiac dysrhythmism, bradycardia (subdued cardiac activity), rise in blood pressure, shock and circulatory collapse as well as muscular rigidity

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

12. ECOLOGICAL INFORMATION

Ecotoxic effects: biologic effects

Toxic for aquatic organisms Toxic for plants and animals

Fish toxicity: Brreiro $LC_0 < 100\text{mg/l}$

Behaviour in environmental compartments:

Evaluation number(FRG)(bacteria): 1.5: Evaluation number (FRG)(Fish):

2.9; Evaluation number(FRG)(mammal): 5

Further ecologic data:

The following applies to barium compounds in general.

Biologic effects: fish; lethal as from 158 mg/l: *Salmo* lethal from 158 mg/l (as BaCl_2); *L. idus* LC_{50} : 870 mg/l (as BaCl_2); barium ions toxic for aquatic organisms; algae: *Sc quadricauda* toxic as from 34 mg/l;

Crustaceans: toxic as from 29 mg/l; hazard for drinking water.

Do not allow to enter water, waste water, or soil.

The following applies to nitrates in general: may contribute to the eutrophication of water supplies. Hazard for drinking water. Fish: $LC_{50} > 500\text{ mg/l}$.



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13. DISPOSAL METHOD

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 corresponding laws and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

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

14. TRANSPORT INFORMATION

Transport over land

ADR/RID and GGVS/GGVE : GGVS/GGVE class: 5.1 Number and letter: 29b

ADR/RID class : 5.1 Number and letter: 29b

Name of material : BARIUM NITRATE

River transport AND/ADNR: Not examined

Sea transport IMDG : IMDG class: 5.1 UN -No.: 1446 Packaging group: II

Ems : 5.1-05 MFAG: 120

Correct technical name: BARIUM NITRATE

Air transport

ICAO-TI and IATA-DGR: ICAO/IATA class : 6.1/5.1 UN/ID-No. : 1446

Packaging group: II

Correct technical name: BARIUM NITRATE



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15. REGULATORY INFORMATION

Labelling according to EC Directives

Symbol : Xn Harmful
R- Phrases : 20/22 Harmful if swallowed and by inhalation
S-phrases : 28 Avoid contact with skin wash immediately with plenty of water.
Water pollution class : 1 (slightly polluting substance)

16. OTHER INFORMATION

Reason for alteration

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