Material Safety Data Sheet

Bismuth Nitrate Pentahydrate (RXSOL-61-6398-100)

1. Product and Company Identifaction

Product Name	Bismuth Nitrate Pentahydrate
Product Type	RXSOL-61-6398-100

Company Details:
RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

Phone	+91 22 65113333/ 5555 / 9999 / 27611360 / 27815540
Fax	+91 22 2781 1318 :::AOH :0091 9322594669
Email	mail@rxmarine.com

2. Composition / informationon ingredients

Substances:

Formula	:$BiN_3O_9 \cdot 5H_2O$
Molecular Weight	:485,07 g/mol

Component	Concentration
Bismuth nitrate, hydrate (1:5)	

CAS-No.	EC-No.
10035-06-0	233-791-8

3. Hazards Identification

Classification of the substance or mixture:
Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Oxidizing solids	:(Category 2)
Skin irritation	:(Category 2)
Eye irritation	:(Category 2)

Specific target organ toxicity - single exposure (Category 3)

Classification according to EU Directives 67/548/EEC or 1999/45/EC:

Contact with combustible material may cause fire. Irritating to eyes, respiratory system and skin:

Label elements:

Labelling according Regulation (EC) No 1272/2008 [CLP]:

Signal word Danger

Hazard statement(s)

May intensify fire; oxidiser.

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation .

recautionary statement(s)

Keep/Store away from clothing/ combustible materials.

Avoid breathing dust.

Statements:

According to European Directive 67/548/EEC as amended.

Hazard symbol(s)

R-phrase(s)	
R 8	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 case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S36	Wear suitable protective clothing.

Other hazards - none

4. First Aid Measures

Description of first aid measures General advice:
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled:
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact:
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact:
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed:
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed:
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated., Symptoms of chronic bismuth toxicity in humans consists of decreased appetite, weakness, rheumatic pain, diarrhea, fever, metal line on the gums, foul breathe, gingivitis, and dermatitis.Jaundice and conjunctival hemorrhage are rare, but have been reported. Bismuth nephropathy withproteinuria may occur. The kidney is the site of highest concentration with the liver being considerablylower. Bismuth does pass into the amniotic fluid and into the fetus.

Indication of any immediate medical attention and special treatment needed:
no data available

5. Fire-fighting Measures

Suitable extinguishing media:
Use water spray, alcohol- resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture:
Nature of decomposition products not known.

Advice for firefighters:
Wear self contained breathing apparatus for fire fighting if necessary.

Further information:
Use water spray to cool unopened containers.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:
Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensureadequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions: Do not let product enter drains

Methods and materials for containment and cleaning up:
Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keepin suitable, closed containers for disposal.

Reference to other sections:
For disposal see section 13.

7. Handling and Storage

Precautions for safe handling:
Avoid contact with skin and eyes. Avoid formation of dust and rosols.Provide appropriate exhaust ventilation at places where dust is formed .Keep away from sources of ignition - No smoking.Keep away from heat and sources of ignition.

Conditions for safe storage, including any incompatibilities :
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.hygroscopic

Specific end uses:
No data available

8. Exposure controls and personal protection

Appropriate engineering controls:
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment:
Eye/face protection:
Safety glasses with side-shields conforming to EN166 Use equipment for yeprotection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection:
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose ofcontaminated gloves after use in accordance with applicable laws and good laboratory practices.Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC andthe standard EN 374 derived from it.

Immersion protection

Material	:Nitrile rubber
Minimum layer thickness	:0,11 mm
Break through time	:> 480 min
Material tested	:Dermatril® (Aldrich Z677272, Size M)
Splash protection	
Material	:Nitrile rubber
Minimum layer thickness	:0,11 mm
Break through time	:> 30 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection:
impervious clothing, The type of protective equipment must be selected according to theconcentration and amount of the dangerous substance at the specific workplace.

Respiratory protection:
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Userespirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. Physical and chemical properties

Information on basic physical and chemical properties:

Appearance Form	:solid
Odour	:No data available
Odour Threshold	:No data available
pH	:No data
Melting point/freezing point	:Melting point/range: 30 °C - lit.
Initial boiling point and boiling range	75 - 80 °C - lit.
Flash point	:No data available
Evaporation rate	:No data available
Flammability (solid, gas)	:No data available
Upper/lower flammability or explosive limits	:No data available
Vapour pressure	:No data available
Vapour density	:No data available
Relative density	:2,83 g/cm3
Water solubility	:No data available
Partition coefficient: noctanol/ water	:No data available
Autoignition temperature	:No data available
Decomposition temperature	:No data available
Viscosity	:No data available
Explosive properties	:No data available
Oxidizing properties	The substance or mixture is classified as oxidizing with the category2.

Other safety information: No data available

10. Stability and reactivity

Reactivity: No data available

Chemical stability: No data available

Possibility of hazardous reactions: No data available

Conditions to avoid : Avoid moisture
.
Incompatible materials:
Organic materials, Strong reducing agents, Strong acids, Powdered metals

Hazardous decomposition products:
Other decomposition products - no data available

11. Toxicological information

Information on toxicological effects:
Acute toxicity:

LD50 Oral - mouse - 3.710 mg/kg LD50 Intraperitoneal - mouse - 71 mg/kg

Skin corrosion/irritation: No data available

Serious eye damage/eye irritation:
No data available

Respiratory or skin sensitization:
Germ cell mutagenicity: No data available
Carcinogenicity:
IARC:
No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity : No data available

Specific target organ toxicity : single exposure

Inhalation : May cause respiratory irritation.

Specific target organ toxicity - repeated exposure: No data available

Aspiration hazard: No data available

Potential health effects:

Inhalation :

Inhalation	:May be harmful if inhaled. Causes respiratory tract irritation.
Ingestion	:May be harmful if swallowed.
Skin	:May be harmful if absorbed through skin. Causes skin irritation
Eyes	:Causes serious eye irritation.

Additional Information
RTECS: Not available

12. Ecological information

Toxicity: No data available

Persistence and degradability : No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

Results of PBT and vPvB assessment: no data available

Other adverse effects: No data available

13. Disposal considerations

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in ignitingas this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging : Dispose of as unused product

14. Transport information

UN number:

ADR/RID	:1477 IMDG	:1477 IATA	:1477

UN proper shipping name:

ADR/RID	:NITRATES,INORGANIC,N.O.S.
IMDG:	:NITRATES, INORGANIC, N.O.S

IATA :Nitrates, inorganic, n.o.s.

Transport hazard class(es):

ADR/RID: 5.1 :IMDG: 5.1 :'IATA: 5.1

Packaging group:

ADR/RID: II IMDG: II IATA: II

Environmental hazards:
ADR/RID: No IMDG Marine pollutantno IATA: No
Special precautions for user: No data available

15. Regulatory information

REGULATORY INFORMATION:
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture: N o data available

Chemical Safety Assessment: No data available

16. Other information

Text of R and S phrase codes used in this safety data sheet:- R34: Causes burns; R36: Irritating to eyes; R37: Irritating to respiratory system; R41: Risk of serious damage to eyes. The information provided about the product on this Safety Data Sheet has been compiled from knowledge of the individual constituents The data given here is based on current knowledge and experience. This Safety Data Sheet describes the product in terms of safety requirements and does not signify any warranty with regard to the product's properties The data given here only applies when pro duct used for proper application(s). The product is not sold as suitable for other applications - usage in such may cause risks not mentioned in this sheet. Do not use for other application(s) without seeking advice from manufacturer.