

Section 1: Identification

Common Name/Trade Name	BISMUTH SUBNITRATE USP	
Supplier Information	Letco Medical 1316 Commerce Drive NW Decatur, AL 35601 1 (800) 239-5288 +1 (734) 843-4693	IN CASE OF EMERGENCY: Chemtrec 1 (800) 424-9300 (24 hours)
Product Synonym(s)	Bismuth (III) nitrate basic, Bismuthyl nitrate, Bismuth (III) oxynitrate, Bismuth (III) subnitrate	
Relevant Use(s) of Product	Manufacture or Compounding of Substances	

Section 2: Hazards Identification

Classification of Substance or Mixture	Oxidizing solids (Category 2), Skin irritation (Category 2), Eye irritation (Category 2A), Specific target organ toxicity - single exposure (Category 3)	
Signal Word	Danger	
Hazard Statement(s)	H272 May intensify fire; oxidizer H315 Causes skin irritation H319 Causes serious eye irritation H335 May cause respiratory irritation	
Pictogram(s)		
Precautionary Statement(s)	P220 Keep/Store away from clothing/combustible materials. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P305+P351+P338 IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. continue rinsing.	
Hazards Not Otherwise Classified	No data available	
Ingredient(s) with Unknown Toxicity	No data Available	

Section 3: Composition/Information on Ingredients

Chemical Name	Bismuth(III) nitrate basic Bismuthyl nitrate Bismuth(III) oxynitrate Bismuth(III) subnitrate
Common Name	Bismuth Nitrate
CAS Number	1304-85-4
Impurities and/or Stabilizing Additives	No data available

Section 4: First Aid Measures

General Advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
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	No data available

Section 5: Fire Fighting Measures

Suitable Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Further information: Use water spray to cool unopened containers.
Special Hazards Arising From the Substance/Mixture	Hazardous decomposition products formed under fire conditions. - nitrogen oxides (NOx), Bismuth oxides.
Special PPE and/or Precautions for Firefighters	Wear self contained breathing apparatus for fire fighting if necessary.

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures	Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
Methods and Materials Used for Containment	Sweep up and shovel. Contain spillage, and then collect with and electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.
Cleanup Procedures	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). Keep in suitable, closed containers for disposal. Do not let product enter drains.

Section 7: Handling and Storage

Precautions for Safe Handling	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. 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. Normal measures for preventative fire protection.
Conditions for Safe Storage	Keep container tightly closed in a dry and well-ventilated place.

Section 8: Exposure Controls/Personal Protection

Components with Workplace Control Parameters	Contains no substances with occupational exposure limit values.
Appropriate Engineering Controls	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
PPE - Eye/Face Protection	Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
PPE - 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 of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
PPE - Body Protection	Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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 of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
PPE - 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. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9: Physical and Chemical Properties

Appearance	Form: Solid. Color: No data available
Upper/Lower Flammability or Explosive Limits	No data available
Odor	No data available
Vapor Pressure	No data available
Odor Threshold	No data available
Vapor Density	No data available
pH	No data available
Relative Density	4.93 g/cm3
Melting Point/Freezing Point	Melting point/range: 500 °C (932 °F).
Solubility	Water solubility: insoluble.
Initial Boiling Point and Boiling Range	No data available
Flash Point	No data available
Evaporation Rate	No data available
Flammability (Solid, Gas)	No data available
Partition Coefficient	No data available
Auto-Ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available

Section 10: Stability and Reactivity

Reactivity	No data available
Chemical Stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	No data available
Conditions to Avoid	No data available
Incompatible Materials	Alkaline biocarbonates, soluble iodides, gallic acid, calomel, tannins, salicylic acid.
Hazardous Decomposition Products	Hazardous decomposition products formed under fire conditions. - nitrogen oxides (NOx), Bismuth oxides, Other decomposition products - No data available.

Section 11: Toxicological Information

Acute Toxicity - LD50 Oral	No data available
Acute Toxicity - Inhalation	No data available
Acute Toxicity - Dermal	No data available
Acute Toxicity - Eye	No data available
Skin Corrosion/Irritation	No data available
Serious Eye Damage/Irritation	No data available
Respiratory or Skin Sensitization	No data available
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.
Carcinogenicity ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
Carcinogenicity NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP
Carcinogenicity OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
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

Section 12: Ecological Information

Toxicity	No data available
Persistence and Degradability	No data available
Bio-accumulative Potential	No data available
Mobility in Soil	No data available
Other Adverse Effects	No data available

Section 13: Disposal Considerations

Waste Treatment Methods Product	Burn in a chemical incinerator equipped with an after burner and scrubber but exert extra care in igniting as the material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Waste Treatment Methods Packaging	Dispose of as unused product.
Special Precautions Landfill or Incinerations	No data available
Other Information	No data available

Section 14: Transport Information

UN Number	1477
UN Proper Shipping Name	Nitrates, inorganic, n.o.s.
Transport Hazard Class(es)	5.1
Packaging Group	II
Environmental Hazards	Marine pollutant: No Poison Inhalation Hazard: No

Section 15: Regulatory Information

OSHA Hazards: Oxidizer, Irritant. SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. SARA 313 Components: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. SARA 311/312 Hazards: Reactivity Hazard, Acute Health Hazard. Massachusetts Right To Know Components: No components are subject to the Massachusetts Right To Know Act. Pennsylvania Right To Know Components: BISMUTH NITRATE BASIC, CAS-No. 1304-85-4. New Jersey Right To Know Components: BISMUTH SUBNITRATE BASIC, CAS-No. 1304-85-4. California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other Information

Prepared By	Lisa Russell
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