

GELEST, INC.

11 East Steel Rd. Morrisville, PA 19067
Phone: (215) 547-1015

**MATERIAL SAFETY
DATA SHEET**

**EMERGENCY TELEPHONE
CHEMTREC: 1-800-424-9300**

NAME USED ON LABEL: BISMUTH 2-ETHYLHEXANOATE 80-85% - CXBI040

CHEMICAL NAME: BISMUTH 2-ETHYLHEXANOATE 80-85% in mineral spirits

SYNONYMS: BISMUTH OCTOATE; 2-ETHYLHEXANOIC ACID, BISMUTH SALT

CHEMICAL FAMILY: BISMUTH COMPOUND

FORMULA: $C_{24}H_{45}O_6Bi$

HMIS CODES HEALTH: 2 FLAMMABILITY: 2 REACTIVITY: 0

INGREDIENTS

IDENTITY	CAS NO.	%	TLV	OSHA PEL
BISMUTH 2-ETHYLHEXANOATE	67874-71-9	>80	not established	
MINERAL SPIRITS (NAPHTHA, MEDIUM ALIPHATIC)	8052-41-3	>20	525 mg/m ³	2000mg/m ³
2-ETHYLHEXANOIC ACID	149-57-5	<5	not established	

PHYSICAL DATA

Boiling Point: >150°C - mineral spirits

Specific Gravity: 1.26

Vapor Density: NA

% volatiles: <20

Molecular Weight: 638.61

Appearance & Color: Yellow-amber liquid

Melting Point: NA

Vapor Pressure, 20°: 2mm - mineral spirits

Solubility in water: insoluble

Evaporation rate: NA

Other: NA

FIRE & EXPLOSION DATA

Flash Point, COC: 49°C (120°F) Autoignition Temp.: not determined

Flammability Limits- mineral spirits LEL: 1.0 UEL: 6.0

Extinguishing Media: Water spray, foam, carbon dioxide, dry chemical.

Special Fire Fighting Procedures: Avoid eye and skin contact. Do not breathe fumes or inhale vapors.

Unusual Fire and Explosion Hazards: Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

-1-(CXBI040)

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose, LC: Lethal Concentration; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; HMIS: Hazardous Material information System; CAS No.: Chemical Abstract Service Registration Number

ENVIRONMENTAL INFORMATION

Spill response: Ventilate area of spill. Absorb into vermiculite, sand or inert material. Sweep material and transfer to a suitable container for disposal.

Recommended Disposal: Dispose of as solid waste. Follow all chemical pollution control regulations.

HEALTH HAZARD DATA

Eye Contact: May cause immediate or delayed severe eye irritation.

Skin contact: May produce irritation or contact dermatitis. Prompt and thorough washing with soap and water will reduce or eliminate potential dermal effects.

Inhalation: Inhalation of dust or particulates may irritate the respiratory tract. Bismuth vapors and dust have moderate toxicity.

Toxicity: oral-rat, LD50: 6470mg/kg

Chronic Toxicity: not determined

SUGGESTED FIRST AID

EYES: In case of contact, immediately flush eyes with flowing water for at least 15 minutes. Get medical attention.

SKIN: Flush with water, then wash with soap and water.

INHALATION: Move exposed individual to fresh air. Administer oxygen if needed. Call a physician.

INGESTION: Never give fluids or induce vomiting if patient is unconscious or having convulsions. Get medical attention.

REACTIVITY DATA

Stability: Stable

Conditions to avoid: Strong oxidizing agents.

Hazardous decomposition products: Organic acid vapors and bismuth oxide fumes.

SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV, NIOSH approved dust and mist respirator.

Eye and Face Protection: Chemical worker's goggles. Do not wear contact lenses.

Other Clothing and Equipment: Rubber, neoprene or nitrile gloves. An eyewash and emergency shower should be available. Launder clothing before reuse.

OTHER PRECAUTIONS

For research and industrial use only.

Storage and Handling: Store in sealed containers.

TRANSPORTATION

DOT SHIPPING NAME: FLAMMABLE LIQUID, NOS (BISMUTH 2-ETHYLHEXANOATE)

DOT HAZARD CLASS: 3

DOT LABEL: Flammable Liquid

DOT ID No: UN1993

PG: III

Prepared by safety and environmental affairs

ISSUE DATE CXBI040: 6/20/03

SUPERSEDES: 3/24/03

The information contained in this document has been gathered from reference materials and/or Gelest, Inc. test data and is to the best knowledge and belief of Gelest, Inc. accurate and reliable. Such information is offered solely for your consideration, investigation and verification. It is not suggested or guaranteed that the hazard precautions or procedures described are the only ones which exist. Gelest, Inc. makes no warranties, express or implied, with respect to the use of such information and assumes no responsibility therefore.

-3-(CXBI040)