

**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: **5-BROMOPENTYLTRIMETHOXYSILANE - SIB1894.2**

CHEMICAL NAME: 5-BROMOPENTYLTRIMETHOXYSILANE, mixed isomers

SYNONYMS: 1-BROMO-5-(TRIMETHOXYSILYL)PENTANE

CHEMICAL FAMILY: ORGANOSILANE

FORMULA: C<sub>8</sub>H<sub>19</sub>BrO<sub>3</sub>Si

HMIS CODES HEALTH: 2 FLAMMABILITY: 2 REACTIVITY: 1

**INGREDIENTS**

IDENTITY	CAS NO.	%	TLV
5-BROMOPENTYLTRIMETHOXYSILANE	773893-02-0	>95	not established

**PHYSICAL DATA**

Boiling Point: 80-1°C at 0.5mm

Specific Gravity: 1.222

Vapor Density (air=1): >1

% volatiles: NA

Molecular Weight: 271.22

Appearance & Color: Clear to straw liquid with mild odor.

Freezing Point: <0°C

Vapor Pressure: <1mm

Solubility in water: reacts

Evaporation rate: NA

Other: NA

**FIRE & EXPLOSION DATA**

Flash Point, COC: >65°C (>150°F) Autoignition Temp.: not determined

Flammability Limits: not determined

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-(SIB1894.2)

## ENVIRONMENTAL INFORMATION

Spill response: May be hazardous to aquatic life if released to open waters. Cover spill with absorbent material. Transfer to a suitable container for disposal.

Recommended Disposal: Hydrolyze material by mixing with water in a hood. Organic layer may be incinerated. Alternately, absorb onto clay or vermiculite and dispose of absorbent material as solid waste. Follow all chemical pollution control regulations.

## HEALTH HAZARD DATA

Eye Contact: Vapors may cause immediate or delayed severe eye irritation. Liquid can cause severe conjunctivitis and corneal damage

Skin contact: May produce irritation or contact dermatitis which may be delayed several hours. Prompt and thorough washing with soap and water will reduce or eliminate potential dermal effects.

Inhalation: A recent study indicated that the related compound, chloropropyltrimethoxysilane, is a genetically active material via inhalation in a bone marrow micronucleus assay in female rats exposed to 200ppm daily over a 28 day period. However, using the same assay, no evidence of genetic activity was found in mice exposed to 500, 1000, or 1625 mg/kg by intraperitoneal injection. The relevance of this information to humans has not yet been determined.

Inhalation of vapors or particulates of will irritate the respiratory tract. Overexposure may produce coughing, headache and nausea.

Oral 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. Call a physician.

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

**NOTE TO PHYSICIAN:** *This product reacts with water in the acid contents of the stomach to form methanol. The combination of visual disturbances, metabolic acidosis and formic acid in urine is evidence of methanol poisoning. The therapeutic intravenous administration of ethanol (10 mls/hour) allows methanol to be preferentially oxidized and reduces production of methanol metabolites. Acidosis must be treated with intravenous administration of sodium bicarbonate and methanol elimination may be increased by hemodialysis, as indicated. Treatment should be based on blood methanol levels and acid-base balance.*

-2-(SIB1894.2)

## REACTIVITY DATA

Stability: Stable in sealed containers stored under dry nitrogen.

Conditions to avoid: Combustible; avoid contact with heat, sparks or open flame.

Incompatibility (materials to avoid): Reacts with water and moisture in air liberating methanol. Avoid contact with peroxides, oxidizing agents, alcohols, acids, Lewis acids.

Hazardous decomposition products: Organic acid vapors, hydrogen bromide, methanol.

## SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV air-supplied organic vapor gas respirator or self-contained breathing apparatus.

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 use only.

Storage and Handling: Store in sealed containers. Containers require grounding during use.

## TRANSPORTATION

DOT SHIPPING NAME: CHEMICALS, NOI.

DOT HAZARD: Not regulated

DOT LABELS: Not Regulated

DOT ID No: Not Regulated

Prepared by safety and environmental affairs      MSDS ISSUE DATE SIB1894.2: 11/14/12  
SUPERSEDES: none

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. Information on this safety data sheet is not intended to constitute a basis for product specifications.

-3-(SIB1894.2)

© 2012 Gelest inc. Morrisville, PA 19067