

GELEST, INC.

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MATERIAL SAFETY DATA SHEET

EMERGENCY TELEPHONE
CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: **TRIMETHYLBROMOTIN, 95% - SNT8445**
CHEMICAL NAME: TRIMETHYLBROMOTIN
SYNONYMS: BROMOTRIMETHYLSTANNANE, TRIMETHYLTIN BROMIDE
CHEMICAL FAMILY: ORGANOTIN
FORMULA: C₃H₉BrSn
HMIS CODES HEALTH: 4 FLAMMABILITY: 2 REACTIVITY:2

INGREDIENTS

IDENTITY	CAS NO.	%	TLV
TRIMETHYLBROMOTIN	1066-44-0	>95	0.1 mg/m ³ as tin
OTHER ORGANOTINS		<5	0.1 mg/m ³ as tin

PHYSICAL DATA

Boiling Point: 165°C Freezing Point: 26-27°C
Specific Gravity: >1 Vapor Pressure, 20°C: not determined
Vapor Density (air=1): >1 Solubility in water: insoluble
% volatiles: 100 Evaporation rate (butyl acetate = 1): <1
Molecular Weight: 243.70 Other: NA
Appearance & Color: Off-white solid or liquid, characteristic odor

FIRE & EXPLOSION DATA

Flash Point, TCC: >110°C (>230°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: Extremely toxic, self-contained breathing apparatus should be worn at all times to avoid inhalation. Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

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ENVIRONMENTAL INFORMATION

Spill response: Cover spill with absorbent material. Transfer to a suitable container for disposal.

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

HEALTH HAZARD DATA

Extremely Toxic The related compound, trimethylchlorotin, is listed on the EPA Extremely Hazardous Substance List. Human fatalities have been reported for workers inhaling vapors of trimethylchlorotin.

Eye Contact: May cause immediate or delayed severe eye irritation. The onset of irritation may not occur until several hours after exposure.

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. Organotins may be absorbed through the skin.

Inhalation: For the related compound trimethylchlorotin. At low levels exposure to trimethylchlorotin may produce coughing, headache and nausea. At higher levels trimethylchlorotin has been reported to cause cerebral edema. Human fatalities have been reported from exposure to trimethylchlorotin vapors. Laboratory animal studies have demonstrated neurotoxicity, decreases in oxidative phosphorylation associated with mitochondrial binding and inhibition of ATPase. The onset of symptoms may be delayed until several hours after exposure. Inhalation of vapors or particulates of organotins will irritate the respiratory tract.

TOXICITY: not determined (trimethylchlorotin -intravenous, rat, LD50: 1.8mg/kg)

Chronic Toxicity: A cumulative toxin. Symptomatic manifestations can follow exposure up to five days. Reported symptoms include memory loss, exhibition of rage and anger, and reduction of sexual function.

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. *Note to physician: Application of corticosteroid creams has been effective in treating severe skin irritation. If blisters develop, they may require abrasion to promote healing.*

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.

REACTIVITY DATA

Stability: Stable

Incompatibility (materials to avoid): Oxidizers. Direct sunlight causes degradation to an inorganic tin salt.

Hazardous decomposition products: Organic acid vapors, dimethyltin oxides.

SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Insure that exhaust is vented properly- caustic scrubbing is recommended. Mechanical is recommended.

Respiratory Protection: A TLV air-supplied or combination organic vapor acid gas respirator is recommended at all times.

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 only.

Storage and Handling: Store in sealed containers in a manner consistent with safe-handling and regulatory requirements for an extremely hazardous substance.

TRANSPORTATION

DOT SHIPPING NAME: ORGANOTIN PESTICIDES, SOLID, TOXIC, N.O.S.
(TRIMETHYLBROMOTIN)

DOT HAZARD CLASS: 6

DOT LABEL: POISON

DOT ID No: UN 2786

PG: I

Prepared by safety and environmental affairs ISSUE DATE SNT8445: 10/4/03
SUPERSEDES: none

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