

GELEST, INC.

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MATERIAL SAFETY
DATA SHEET

EMERGENCY TELEPHONE
CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: **TRI-n-BUTYLCYANOTIN - SNT8087**
CHEMICAL NAME: TRI-n-BUTYLCYANOTIN
SYNONYMS: TRIBUTYLTIN NITRILE; CYANOTRIBUTYLSTANNANE
CHEMICAL FAMILY: ORGANOTIN
FORMULA: C₁₃H₂₇Sn
HMIS CODES HEALTH: 4 FLAMMABILITY: 2 REACTIVITY: 1

INGREDIENTS

IDENTITY	CAS NO.	%	TLV	OSHA PEL
TRI-n-BUTYLCYANOTIN	2179-92-2	>95	0.1 mg/m ³ as tin	0.1mg/m ³ as tin (OSHA PEL for hydrogen cyanide, skin: 5ppm)

PHYSICAL DATA

Boiling Point: not determined	Melting Point: 105-7°C
Specific Gravity: not determined	Vapor Pressure, 160°C: 10mm
Vapor Density: NA	Solubility in water: insoluble
% volatiles: NA	Evaporation rate: NA
Molecular Weight: 316.06	Other: N/A
Appearance & Color: Off-white solid with 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: Fumes are highly toxic. Do not breathe fumes or inhale vapors.
Unusual Fire and Explosion Hazards: **Toxic fumes of hydrogen cyanide will develop when material is exposed to water at elevated temperature.**

-1-(SNT8087)

ENVIRONMENTAL INFORMATION

Spill response: This material is acutely toxic to aquatic life if released to open waters. Cover spill with absorbent material. Transfer to a suitable container for disposal. This material is toxic to wildlife and fish.

Recommended Disposal: Controlled incineration is preferred. Alternately, in an enclosed vessel with a caustic vent scrubber, hydrolyze material by mixing slowly with dilute sodium hydroxide, maintaining basic pH at all times. Aqueous layer contains sodium cyanide. Organic layer may be incinerated. Follow all chemical pollution control regulations.

HEALTH HAZARD DATA

Eye Contact: A severe eye irritant. Will 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: Highly toxic. May be fatal if inhaled. At low levels may cause cyanosis (blue-gray coloring of skin, lips and fingernails caused by lack of oxygen). Inhalation of vapors or particulates of organotins may irritate the respiratory tract.

Oral Toxicity: not determined

Toxicity - ivn mouse, LD50: 18mg/kg

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. *Note to physician: If cyanosis is evident treat for cyanide poisoning. Provide oxygen.*

REACTIVITY DATA

Stability: Stable in sealed containers

Conditions to avoid: Acids and oxidizers. Strong acids will liberate hydrogen cyanide.

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

Hazardous decomposition products: Organic acid vapors, hydrogen cyanide, tin oxides.

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SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV air-supplied or combination organic vapor acid gas respirator with dust prefilter.

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.

Keep out of reach of children.

TRANSPORTATION

DOT SHIPPING NAME: ORGANOTIN COMPOUNDS, SOLID, N.O.S. (TRIBUTYLCYANOTIN)

DOT HAZARD CLASS: 6.1

DOT LABEL: TOXIC

DOT ID No: UN3146

PG: II

Prepared by safety and environmental affairs

ISSUE DATE SNT8087: 10/4/03

SUPERSEDES: 9/23/98

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