

GELEST, INC.

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MATERIAL SAFETY
DATA SHEET

EMERGENCY TELEPHONE
CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: **TRIS(TRIMETHYLSILYLMETHYL)PHOSPHINE - SIT8722.7**

CHEMICAL NAME: TRIS(TRIMETHYLSILYLMETHYL)PHOSPHINE

SYNONYMS: TRIS(TRIMETHYLSILYLMETHYL)PHOSPHANE

CHEMICAL FAMILY: ORGANOSILANE

FORMULA: C₁₂H₃₃PSi₃

HMIS CODES HEALTH: 3 FLAMMABILITY: 4 REACTIVITY: 2

INGREDIENTS

IDENTITY	CAS NO.	%	TLV	OSHA PEL
TRIS(TRIMETHYLSILYLMETHYL)PHOSPHINE	18077-42-4	>95	not established	not established
	(PHOSPHINE:	0.3ppm	0.3ppm)	

PHYSICAL DATA

Boiling Point: 70°C @ 1mm-sub	Freezing Point: 66-70°C
Specific Gravity: 1	Vapor Pressure, 25°: <0.1mm
Vapor Density (air=1): >1	Solubility in water: reacts
% volatiles: NA	Evaporation rate: NA
Molecular Weight: 292.62	Other: NA
Appearance & Color: White solid with disagreeable odor, smokes (may ignite) on contact with air.	

FIRE & EXPLOSION DATA

Flash Point, COC : <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: Irritating fumes and will develop when material is exposed to water or open flame.

ENVIRONMENTAL INFORMATION

Spill response: May be hazardous to aquatic life if released to open waters. Spill responders must wear safety equipment appropriate for flammable and toxic material handling. Cover spill with absorbent material. Transfer to a suitable container for disposal.

Recommended Disposal: Small quantities can be allowed to burn with appropriate controls. Alternately, the material may be destroyed under an inert atmosphere by mixing with sodium hypochlorite (laundry bleach). Organic layer may be incinerated. Follow all chemical pollution control regulations.

HEALTH HAZARD DATA

This material may have health effects similar to phosphine, but no studies have been conducted. Eye Contact: Will cause immediate or delayed severe eye irritation.

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: By analogy this compound should be handled as a poison by inhalation. Effects may include central nervous system depression and irritation of the respiratory tract and pulmonary edema. Overexposure may produce coughing, headache and nausea.

Oral Toxicity: Not determined.

Chronic Toxicity: There are no known chronic effects related to this compound. By analogy with phosphine, low level exposure may lead to anemia, bronchitis and gastrointestinal disturbances.

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.

REACTIVITY DATA

Stability: Stable in sealed containers stored under a dry inert atmosphere.

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

Incompatibility (materials to avoid): Reacts with oxygen. water and moisture in air. Avoid contact with alcohols, acids, oxidizers.

Hazardous decomposition products: Organic acid vapors, phosphines, phosphine oxides.

-2-(SIT8722.7)

SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV air-supplied or NIOSH certified combination organic vapor - amine gas respirator with particle filter.

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.

Exposure of workers with respiratory deficiencies should be prohibited.

Storage and Handling: Store under dry nitrogen or argon in sealed containers below 25°C.

TRANSPORTATION

DOT SHIPPING NAME: SELF-HEATING SOLID, TOXIC, ORGANIC. N.O.S.
TRIS(TRIMETHYLSILYLMETHYL)PHOSPHINE)

DOT HAZARD CLASS: 4.2 SUB: 6.1

DOT LABEL: SPONTANEOUSLY COMBUSTIBLE, TOXIC

DOT ID No: 3128 PG: I

AIR TRANSPORT IS FORBIDDEN

Prepared by safety and environmental affairs MSDS ISSUE DATE SIT8722.7: 10/29/14
SUPERSEDES: none

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-3-(SIT8722.7)

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