

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: **TRI-t-BUTYLPHOSPHINE - OMPH072**

CHEMICAL NAME: TRI-t-BUTYLPHOSPHINE

SYNONYMS: TRS(1,1-DIMETHYLETHYL)PHOSPHINE

CHEMICAL FAMILY: ORGANOPHOSPHORUS COMPOUND

FORMULA: C₁₂H₂₇P

HMIS CODES HEALTH: 3 FLAMMABILITY: 4 REACTIVITY: 2

INGREDIENTS

| IDENTITY | CAS NO. | % | TLV | OSHA PEL |
|----------------------|------------|-----|-----------------|-----------------|
| TRI-t-BUTYLPHOSPHINE | 13716-12-6 | >95 | not established | not established |

PHYSICAL DATA

Boiling Point: 102-3°C @ 13mm

Specific Gravity: 0.834

Vapor Density (air = 1): NA

% volatiles: <3

Molecular Weight: 202.32

Appearance & Color: Off-white waxy solid or light yellow viscous liquid, fumes form on contact with air; garlic-like aroma

Melting Point: 30-31°C

Vapor Pressure, 20°: <2 mm

Solubility in water: insoluble - reacts

Evaporation rate: NA

Other: NA

FIRE & EXPLOSION DATA

Flash Point, CC: -17°C (1°F)

Autoignition Temp.: 168°C

Flammability Limits- LEL: NA UEL: NA

Extinguishing Media: Not combustible.

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

Unusual Fire and Explosion Hazards: None

-1-(OMPH072)

ENVIRONMENTAL INFORMATION

Spill response: Absorb onto clay or vermiculite, sweep material, avoiding inhalation of vapors.

Recommended Disposal: Landfill. Follow all chemical pollution control regulations.

HEALTH HAZARD DATA

Eye Contact: Will cause immediate or delayed eye irritation.

Skin contact: Short term exposure will produce irritation. Long term exposure is corrosive to the skin and mucous membranes.

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

Oral Toxicity- rat, LD50: not determined

Dermal Toxicity- rabbit, LD50: > 200mg/kg

Chronic Toxicity: There are no known chronic effects related to this compound.

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 prompt and thorough washing with will reduce or eliminate potential dermal effects.

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 under inert atmosphere.

Conditions to avoid: Avoid contact with air, oxidizers

Incompatibility (materials to avoid): Oxidizing agents, air

Hazardous decomposition products: Carbon dioxide, phosphorus oxides.

-2-(OMPH072)

SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV NIOSH approved organic vapor / acid respirator is required.

Eye and Face Protection: Safety glasses.

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.

TRANSPORTATION

DOT SHIPPING NAME: PYROPHORIC SOLID, ORGANIC N.O.S.,
(TRI-t-BUTYLPHOSPHINE)

DOT HAZARD CLASS: 4.2

DOT LABELS: SPONTANEOUSLY COMBUSTIBLE

DOT ID No: UN2846

PG: I

Air transport is forbidden.

Prepared by safety and environmental affairs

MSDS ISSUE DATE OMPH072: 11/4/14

SUPERSEDES: none

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