

Section 1 – Chemical Product and Company Identification

MSDS Name: Di- tert-butylsilane

Chemical Family: Organosilanes

Molecular Formula: $[t-C_4H_9]_2SiH_2$

Use of the substance: Industrial Manufacturing

Company: Optima Chemicals Group, LLC
200 Willacoochee Hwy.
Douglas, Georgia 31535
Telephone (912) 384-5101 FAX (912) 384-6330
Emergencies: Telephone (912) 384-5101

Section 2 – Hazards Identification

Hazards:

Flammable liquid, clear liquid with a faint odor, eye irritant.
May be corrosive or irritating to eyes, skin, nose and throat.

NFPA Rating: Health: 0 Flammability: 3 Reactivity: 0 Special: None

Section 3 – Composition, Information on Ingredients

| <u>CAS #</u> | <u>Chemical Name</u> | <u>Wt.%</u> |
|--------------|----------------------|-------------|
| 30736-07-3 | Di-tert-butylsilane | 97 |

Section 4 – First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, lifting upper and lower lids.
Seek medical attention.

Skin: Quickly wipe off as much as possible, then immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing. Thoroughly wash with soap and water, and seek medical attention.

Ingestion: Quickly wipe material from the mouth, and rinse mouth out with plenty of water. Dilute with 1 or 2 glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention.

Inhalation: Remove from exposure, to fresh air immediately. If breathing discomfort occurs and persists, seek medical attention. If not breathing give artificial respiration, and seek medical attention.

Notes to Medical Doctor: This product may be severely irritating to the eyes, skin and mucous membranes. Treatment is controlled, removal of exposure with symptomatic and supportive care.

Section 5 – Fire Fighting Measures

Flammable Limits: Upper: Not available Lower: Not available

General Hazard: flammable liquid.

Fire Extinguishing Agents Recommended: Dry Chemical, CO₂, water spray, regular foam.

Hazardous Combustion Products: Carbon dioxide, carbon monoxide, silicon oxide.

Special Fire fighting Procedures: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Do not breathe smoke, gases or vapors generated.

Autoignition temperature: Not applicable.

Properties contributing to flammability: Volatility of liquid.

Flashpoint: 5°C

Sensitivity to Static Discharge: Not available

Sensitivity to Impact: None

Section 6 – Accidental Release Measures

Remove all sources of ignition. Do not use water in the initial phases of clean-up. Contain spill with absorbent. Transfer to approved transport container and clean up spillage with an absorbent. Dispose of waste according to local and Federal laws and regulations. Before cleanup measures begin, review the entire MSDS with particular attention to Section 3, and Section 8.

Section 7 - Handling and Storage

Handling: Do not get in eyes, on skin or clothing. Do not breathe vapors or mist. Wash thoroughly after handling.

Storage: Store in cool, dry place. Store in tightly closed container. Keep away from sources of ignition, water, air, and oxidizing materials. Moisture will degrade

Section 8 – Exposure Controls, Personal Protection

Exposure Limits: PEL (OSHA) –None, TWA (ACGIH) – None, STEL/Ceiling (OSHA) – None.

Engineering Controls: Use in closed system under argon or nitrogen. If personal contact can occur, use local exhaust ventilation (explosion proof), to keep airborne concentrations low.

Eyes and Face: Wear splash goggles with a face shield.

Skin: Chemical resistant gloves clothing.

Respiratory: When engineering controls are not adequate, wear a NIOSH/MSHA respirator approved for protection against organic vapors and mists.

Work Hygienic Practices: Quick-drench eyewash and safety shower.

Section 9 – Physical and Chemical Properties

Appearance and Odor: Clear liquid, faint odor.

Melting Point: -38°C

Boiling Point: 128°C

Flash Point: 5°C

Vapor Pressure: Not available

Vapor Density: Not available

pH: Not available

Specific Gravity: 0.738 g/cc

Percent Volatile: 100%

Water Solubility: Insoluble

Evaporation Rate: Not available

Flammable Limits: Not available

Molecular Weight: 144.0

Autoignition Temperature: Not applicable

Viscosity: Not available

Decomposition Temperature: Not available

Explosive Properties: Not explosive

Oxidizing Properties: Not an oxidizer

Section 10 – Stability and Reactivity

Stability: Stable

Incompatibility: Oxidizers

Hazardous Polymerization: Does not polymerize

Hazardous Decomposition Products: None

Conditions to Avoid: Heat, sources of ignition.

Section 11 – Toxicological Information

Eyes: Irritating to eyes.

Skin: expected to be irritating and corrosive to skin.

Ingestion: No data available.

Inhalation: No data available.

Acute Effects from Overexposure: May be corrosive and irritating to eyes, skin, nose and throat.

Chronic Effects from Overexposure: No data available.

Sensitization: No data available.

Carcinogenicity: Not listed by NTP, OSHA, EH40. IARC, or ACGIH.

Mutagenicity: No data available.

Reproductive Toxicity: No data available.

Section 12 – Ecological Information

Ecotoxicological Information: No data available.

Chemical Fate Information: No data available.

Section 13 – Disposal Considerations

Dispose of in accordance with federal, state, and local regulations.

Section 14 – Transport Information

DOT Shipping: Flammable liquid, n.o.s., (di-tertiary-butyl silane) 3, UN1993, PG II
Labels: Flammable
Marine Pollutant: No

Custom Tariff Number: 2942.00.0000

PIH: Not designated Poison Inhalation Hazard by USDOT.

Section 15 – Regulatory Information

United States:

Section 311 Hazard Category (40CFR 370): Immediate, fire hazard, acute health hazard.

Section 313 Reportable Ingredients (40 CFR 372): No reporting requirements.

Section 302 Extremely Hazardous Substances (40 CFR 355): Not listed.

CERCLA Hazardous Substance, RQ, (40 CFR 302.4): Not listed.

TSCA Sec 12B Export Notification: Not subject to these requirements.

TSCA Inventory Status (40 CFR 710): Listed

Canada:

WHMIS: Hazard Classification – UN 2924, Class E, (Corrosive), Ingredient Disclosure List:
Not listed.

Section 16 – Additional Information

Creation Date: 02/23/2010

This MSDS has been prepared to meet U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200 and Canada's Workplace Hazardous Materials Information System (WHMIS) requirements.

This information is believed to be accurate and represents the best information currently available to Optima Chemical Group LLC. However, we make no warranty of merchantability, express or implied, with respect to such information and assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

