1. PRODUCT AND COMPANY IDENTIFICATION

Product name: tert-Butyl(dimethyl)silyl chloride
Product Number: 190500
Brand: Aldrich
Supplier: Sigma Aldrich
3050 Spuce Street
SAINT LOUIS MO 63113
USA
Telephone: +1 800-325-5632
Fax: +1 800-325-5652
Emergency Phone # (For both supplier and manufacturer): (314) 776-5555
Preparation Information: Sigma-Aldrich Corporation
Product Safety - Americas Region
1-600-521-6956

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards
Flammable solid, Corrosive

GHS Classification
Flammable solids (Category 2)
Acute toxicity, Oral (Category 5)
Skin corrosion (Category 1B)
Serious eye damage (Category 1)

GHS Label elements, including precautionary statements

Pictogram

Signal word
Danger

Health hazard(s)
Flammable solid.
May be harmful if swallowed.
Causes severe skin burns and eye damage.

Precautionary statement(s)
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep away from dust; avoid contact with skin, eyes or clothing.
Use non-sparking tool.
Wear protective gloves/ protective clothing/ eye protection/ face protection.
Immediately call a POISON CENTER or doctor/physician.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: tert-Butyl(dimethyl)silyl chloride
tert-Butyl(chloromethyl)dimethylsilane TBMSCI
Formula: C8H15OSi
Molecular Weight: 152.2

Component Concentration

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>EC-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>18169-18-6</td>
<td>242-042-4</td>
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4. FIRST AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If Inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.
In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.
If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Conditions of flammability
Flammable in the presence of a source of ignition, through friction or retained heat. Keep away from heat/sparks/open flame/hot surface. No smoking.

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters
Wear self-contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas, silicon oxides

Further Information
Wear high/tightness material liberating acidic gas which in contact with metal surfaces can generate flammable and/or explosive hydrogen gas. Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

SIGMA-ALDRICH

Material Safety Data Sheet
Version 4.5
Revision Date: 04/20/2012
Print Date: 10/25/2012

Health hazard: 3
Fire: 3
Reactivity hazard: 3
Potential Health Effects

Inhalation
May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Skin
May be harmful if absorbed through skin. Causes skin burns.

Eyes
Causes eye burns.

Ingestion
May be harmful if swallowed.

SIGMA-ALDRICH

Material Safety Data Sheet
Version 4.5
Revision Date: 04/20/2012
Print Date: 10/25/2012

Health hazard: 3
Fire: 3
Reactivity hazard: 3
Potential Health Effects

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Eyes
Causes eye burns.

Ingestion
May be harmful if swallowed.
7. HANDLING AND STORAGE

Precautions for safe handling
Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.
Hydrolyses readily. Moisture sensitive.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection
Complete suit protecting against chemicals. Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Ferm crystalline
Colour white

Safety data
pH no data available
Melting Melting point/range: 86 - 69 °C (187 - 192 °F) - lit.

point/freezing point
Boiling point 125 °C (257 °F) - lit.
Flash point 22 °C (72 °F) - closed cup
Flammability (solid, gas) The substance or mixture is a flammable solid with the category 2.
Ignition temperature 405 °C (761 °F)
Autoignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available
Vapour pressure no data available
Density 0.870 g/cm3
Water solubility insoluble
Partition coefficient: n-octanol/water no data available
Relative vapour density no data available
Odour no data available
Odour threshold no data available
Evaporation rate no data available

10. STABILITY AND REACTIVITY

Chemical stability
May decompose on exposure to moist air or water. Stablib under recommended storage conditions.

Possibility of hazardous reactions no data available

Conditions to avoid
Heat, flames and sparks. Extremes of temperature and direct sunlight.

Materials to avoid
Bases, Metals, Oxidizing agents, Alcohols

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen fluoride gas, silicon oxides
Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity
Oral LD50
LD50 Oral - rat - > 2,000 mg/kg
Inhalation LC50 no data available
Dermal LD50 no data available

Other Information on acute toxicity no data available

Skin corrosion/irritation no data available

Serious eye damage/eye irritation
no data available
Respiratory or skin sensitization
no data available
Genotoxigenicity
no data available
Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity
no data available
Teratogenicity
no data available
Specific target organ toxicity - single exposure (Globally Harmonized System)
no data available
Specific target organ toxicity - repeated exposure (Globally Harmonized System)
no data available
Aspiration hazard
no data available
Potential health effects
Inhalation: May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Ingestion: May be harmful if swallowed.
Skin: May be harmful if absorbed through skin. Causes skin burns.
Eyes: Causes eye burns.
Signs and Symptoms of Exposure
Burning sensation, cough, wheezing, laryngitis, shortness of breath, spasms, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary oedema. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.
Synergistic effects
no data available
Additional Information
RTECS: VV200000

11. DISPOSAL CONSIDERATIONS
Product
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Comprehensive packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION
DOT (US)
UN number: 2925 Class: 4.1 (8) Packing group: Ii
Proper shipping name: Flammable solids, corrosive, organic, n.o.s. (t-butylchloromethylsilane)
Reportable Quantity (RQ): Marine pollutant: No
Pelson Inhalation Hazard: No
IMDG
UN number: 2925 Class: 4.1 (8) Packing group: Ii
Proper shipping name: FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S. (t-butylchloromethylsilane)
Marine pollutant: No
IATA
UN number: 2925 Class: 4.1 (8) Packing group: Ii
Proper shipping name: Flammable solid, corrosive, organic, n.o.s. (t-butylchloromethylsilane)

15. REGULATORY INFORMATION
OSHA Hazards
Flammable solid, Corrosive
SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minima) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards
Fire Hazard, Acute Health Hazard
Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.
Pennsylvania Right To Know Components
CAS-9162-48-6
New Jersey Right To Know Components
CAS-No. 18162-48-6

12. ECOLOGICAL INFORMATION
Toxicity
no data available
Persistence and degradability
no data available
Bioaccumulative potential
no data available
California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Further information
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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.