

# **SAFETY DATA SHEET**

Creation Date 30-Apr-2010 Revision Date 14-Feb-2020 Revision Number 2

## 1. Identification

Product Name tert-Butyldiphenylchlorosilane

Cat No. : A12721

**CAS-No** 58479-61-1

Synonyms tert-Butyldiphenylsilyl chloride

Recommended Use Laboratory chemicals.

**Uses advised against** Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

#### Company

Alfa Aesar

Thermo Fisher Scientific Chemicals, Inc.

30 Bond Street

Ward Hill, MA 01835-8099

Tel: 800-343-0660 Fax: 800-322-4757 **Email:** tech@alfa.com

www.alfa.com

### **Emergency Telephone Number**

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660.

After normal business hours, call Carechem 24 at (866) 928-0789.

# 2. Hazard(s) identification

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation Category 1 B
Serious Eye Damage/Eye Irritation Category 1
Specific target organ toxicity (single exposure) Category 3

Target Organs - Respiratory system.

## Label Elements

### Signal Word

Danger

#### **Hazard Statements**

Causes severe skin burns and eye damage May cause respiratory irritation



## **Precautionary Statements**

#### Prevention

Wear protective gloves/protective clothing/eye protection/face protection

Do not breathe dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Wash face, hands and any exposed skin thoroughly after handling

#### Response

Call a POISON CENTER or doctor/physician if you feel unwell

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

#### Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Immediately call a POISON CENTER or doctor/physician

Wash contaminated clothing before reuse

#### **Eves**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

#### Ingestion

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

### **Storage**

Store locked up

Store in a well-ventilated place. Keep container tightly closed

#### Disposal

Dispose of contents/container to an approved waste disposal plant

## Hazards not otherwise classified (HNOC)

Contact with water liberates toxic gas

## 3. Composition/Information on Ingredients

| Component                                  | CAS-No     | Weight % |  |  |
|--|------------|----------|--|--|
| Silane, chloro(1,1-dimethylethyl)diphenyl- | 58479-61-1 | >95      |  |  |

#### 4. First-aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in

attendance.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Immediate medical

attention is required.

Inhalation Remove to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the

substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. If

not breathing, give artificial respiration.

**Ingestion** Do NOT induce vomiting. Call a physician or poison control center immediately.

Most important symptoms and

effects

Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue

and danger of perforation Treat symptomatically

Notes to Physician

5. Fire-fighting measures

Suitable Extinguishing Media CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam.

Unsuitable Extinguishing Media DO NOT USE WATER

**Flash Point** 149 °C / 300.2 °F

Method - No information available

Autoignition Temperature 480 °C / 896 °F

**Explosion Limits** 

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

#### **Specific Hazards Arising from the Chemical**

Corrosive material. Contact with water liberates toxic gas. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

#### **Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO2). Hydrogen chloride gas.

## **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 3      | 1            | 1           | W                |

## 6. Accidental release measures

Personal Precautions Use personal protective equipment as required. Evacuate personnel to safe areas. Ensure

adequate ventilation. Do not get in eyes, on skin, or on clothing.

**Environmental Precautions** Avoid release to the environment.

**Methods for Containment and Clean** Do not expose spill to water. Soak up with inert absorbent material. Keep in suitable, closed **Up** containers for disposal.

Up containers for disposal.

#### 7. Handling and storage

**Handling** Use only under a chemical fume hood. Wear personal protective equipment/face protection.

Do not get in eyes, on skin, or on clothing. Do not ingest. If swallowed then seek immediate medical assistance. Do not breathe mist/vapors/spray. Do not allow contact with water.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from

water or moist air. Store under an inert atmosphere. Corrosives area.

### 8. Exposure controls / personal protection

**Exposure Guidelines** 

This product does not contain any hazardous materials with occupational exposure

limitsestablished by the region specific regulatory bodies.

Engineering Measures Use only under a chemical fume hood. Ensure that eyewash stations and safety showers

are close to the workstation location.

**Personal Protective Equipment** 

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166. Tight sealing safety goggles. Face protection shield.

**Skin and body protection**Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

## Physical and chemical properties

Physical StateLiquidAppearanceLight yellowOdorpungent

Odor Threshold

pH

No information available

No information available

Melting Point/Range No data available

Boiling Point/Range 135 °C / 275 °F @ 0.7 mmHg

Flash Point 149 °C / 300.2 °F
Evaporation Rate No information available

Flammability (solid,gas) Not applicable

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information availableVapor DensityNo information available

Specific Gravity 1.060

Solubility

Partition coefficient; n-octanol/water

Autoignition Temperature

Decomposition Temperature

Viscosity

No information available
480 °C / 896 °F
No information available
16 mPa.s at 25 °C
Molecular Formula

No information available
16 mPa.s at 25 °C
C16 H19 CI Si

Molecular FormulaC16 H19Molecular Weight274.86

## 10. Stability and reactivity

Reactive Hazard Yes

**Stability** Water reactive. Moisture sensitive.

Conditions to Avoid Incompatible products. Excess heat. Exposure to moist air or water.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen chloride gas

Hazardous Polymerization Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity** 

**Product Information** 

No acute toxicity information is available for this product

**Component Information Toxicologically Synergistic** 

No information available

**Products** 

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Causes burns by all exposure routes

Sensitization No information available

The table below indicates whether each agency has listed any ingredient as a carcinogen. Carcinogenicity

| Component              | CAS-No     | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|------------------------|------------|------------|------------|------------|------------|------------|
| Silane,                | 58479-61-1 | Not listed |
| chloro(1,1-dimethyleth |            |            |            |            |            |            |
| vl)diphenvl-           |            |            |            |            |            |            |

No information available **Mutagenic Effects** 

No information available. **Reproductive Effects** 

**Developmental Effects** No information available.

**Teratogenicity** No information available.

STOT - single exposure Respiratory system STOT - repeated exposure None known

No information available **Aspiration hazard** 

delayed

Symptoms / effects,both acute and Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes

severe swelling, severe damage to the delicate tissue and danger of perforation

**Endocrine Disruptor Information** No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

## 12. Ecological information

**Ecotoxicity** 

Do not empty into drains.

Persistence and Degradability Insoluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

Is not likely mobile in the environment due its low water solubility. Will likely be mobile in the Mobility

environment due to its volatility.

#### 13. Disposal considerations

**Waste Disposal Methods** 

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

# 14. Transport information

DOT

UN-No UN2987

Proper Shipping Name Chlorosilanes, corrosive, n.o.s.

Hazard Class 8
Packing Group ||

<u>TDG</u>

UN-No UN2987

Proper Shipping Name Chlorosilanes, corrosive, n.o.s.

Hazard Class 8
Packing Group ||

<u>IATA</u>

**UN-No** UN2987

**Proper Shipping Name** Chlorosilanes, corrosive, n.o.s.

Hazard Class 8
Packing Group ||

IMDG/IMO

UN-No UN2987

Proper Shipping Name Chlorosilanes, corrosive, n.o.s.

Hazard Class 8
Packing Group ||

## 15. Regulatory information

### **United States of America Inventory**

| Component                          | CAS-No     | TSCA | TSCA Inventory notification - Active/Inactive | TSCA - EPA Regulatory<br>Flags |  |
|------------------------------------|------------|------|---|--------------------------------|--|
| Silane,                            | 58479-61-1 | X    | ACTIVE  | -                              |  |
| chloro(1,1-dimethylethyl)diphenyl- |            |      |   |                                |  |

## Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

#### **International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

| Component                          | CAS-No     | DSL | NDSL | EINECS    | PICCS | ENCS | AICS | IECSC | KECL |
|------------------------------------|------------|-----|------|-----------|-------|------|------|-------|------|
| Silane,                            | 58479-61-1 | -   | X    | 261-282-0 | X     | -    | Χ    | -     | -    |
| chloro(1,1-dimethylethyl)diphenyl- |            |     |      |           |       |      |      |       |      |

## U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and

Health Administration

Not applicable

CERCLA Not applicable

**California Proposition 65**This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know

Regulations

Not applicable

**U.S. Department of Transportation** 

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

**Security** 

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade Slight risk, Grade 1

## 16. Other information

Prepared By Health, Safety and Environmental Department

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 Creation Date
 30-Apr-2010

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 14-Feb-2020

 Print Date
 14-Feb-2020

**Revision Summary** SDS authoring systems update, replaces ChemGes SDS No. 58479-61-1/2.

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS