

# TCI AMERICA SAFETY DATA SHEET

Revision number: 1 **Revision date: 07/06/2018** 

1. IDENTIFICATION

Product name: tert-Butyldimethylchlorosilane [tert-Butyldimethylsilylating Agent]

Product code:

For laboratory research purposes. Product use: Restrictions on use: Not for drug or household use.

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Emergency telephone number:

Chemical Emergencies:

TCI America (8:00am - 5:00pm) PST

+1-503-286-7624

Transportation Emergencies: Chemtrec 24-Hour

+1-800-424-9300 (U.S.A.)

+1-703-527-3887 (International) Responsible department:

TCI America

Environmental Health Safety and Security

+1-503-286-7624

## 2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:

WHMIS 2015:

Eye Damage/Irritation [Category 1] Flammable Solids [Category 1] Skin Corrosion/Irritation [Category 1B]

Signal word: Danger!

Hazard Statement(s): Flammable solid

Causes severe skin burns and eye damage

Pictogram(s) or Symbol(s):



Precautionary Statement(s):

[Prevention]

Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Do not breathe dusts or mists. Wash hands and face thoroughly after handling. Wear protective gloves,

protective clothing, face protection.

[Response]

If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a poison center or doctor. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor. 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. In case of fire: Use dry chemical, dry sand or foam to extinguish.

Store locked up.

[Storage] [Disposal]

Dispose of contents and container in accordance with local, regional, national regulations (e.g. US: 40

CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc.).

Hazards not otherwise classified:

[HNOC]

May develop pressure

## COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

Components: tert-Butyldimethylchlorosilane [tert-Butyldimethylsilylating Agent]

Percent: >98.0%(GC) CAS RN: 18162-48-6 Molecular Weight: 150.72 **Chemical Formula:** C<sub>6</sub>H<sub>15</sub>CISi

Synonyms: TBDMSCI, TBSCI, tert-Butylchlorodimethylsilane, tert-Butyldimethylsilyl Chloride

# 4. FIRST-AID MEASURES

Description of first aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a

POISON CENTER or doctor/physician.

Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water.

Immediately call a POISON CENTER or doctor/physician.

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Eye contact:

Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting. Ingestion:

Symptoms/effects:

Pain. Redness. Acute: Delayed: No data available

## Indication of any immediate medical attention:

Not available.

Notes to physician: No data available

## 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Dry chemical, carbon dioxide.

Unsuitable extinguishing media:

Water

Specific hazards arising from the

chemical:

These products include: Carbon oxides Halogenated compounds Silicates

Hazardous combustion products: Other specific hazards:

Advice for firefighters:

WARNING: Highly toxic HCl gas is produced during combustion.

Wear self-contained breathing apparatus if possible.

# 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective

equipment and emergency procedures:

**Environmental precautions:** 

Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

Prevent product from entering drains.

Methods and materials for containment

and cleaning up:

Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected

Prevention of secondary hazards:

material should be promptly disposed of, in accordance with appropriate laws and regulations. Do not allow contact with water. Remove all sources of ignition. Fire-extinguishing devices should be

Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.

prepared in case of a fire. Use spark-proof tools and explosion-proof equipment.

# 7. HANDLING AND STORAGE

Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent Precautions for safe handling:

dispersion of dust. Keep away from heat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of electrostatic charge. Wash hands and face thoroughly after handling.

Use a closed system if possible. Use a local exhaust if dust or aerosol will be generated.

Avoid contact with skin, eyes and clothing. May develop pressure. Open carefully.

Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Store in a cool and dark place.

Store under inert gas. Protect from moisture. Store locked up. Store away from incompatible materials such as oxidizing agents.

Moisture-sensitive Comply with laws.

Packaging material:

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate engineering controls: Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed

system or local exhaust. Also install safety shower and eye bath.

Personal protective equipment

Respiratory protection: Dust respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators

approved under appropriate government standards and follow local and national regulations.

Hand protection: Impervious gloves.

**Eye protection:** Safety goggles. A face-shield, if the situation requires.

**Skin and body protection:** Impervious protective clothing. Protective boots, if the situation requires.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Solid

Form: Crystal - Powder
Colour: White - Almost white
Odour: No data available
Odor threshold: No data available
Odour threshold: No data available

Melting point/freezing point:88°C (190°F)Boiling point/range:125°C (257°F)Decomposition temperature:No data availableRelative density:No data availableKinematic viscosity:No data available

Log Pow: No data available Evaporation rate(Butyl No data available

Acetate=1):

pH:

Vapour pressure:

**Dynamic Viscosity:** 

Vapour density:

Flash point: No data available Autoignition temperature: 200°C (392°F)

Flammability (solid, gas): No data available Flammability or explosive limits:

Lower: No data available
Upper: No data available

No data available

No data available.

No data available

No data available

Solubility(ies):

[Water] No data available

[Other solvents]

**Soluble:** Ether, Benzene, Toluene, Dichloromethane

# 10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Stable under proper conditions.

Possibility of hazardous reactions: Dust explosion possible if in powder or granular form, mixed with air. Decomposes in contact with water

and liberates toxic gases.

Conditions to avoid: Spark, Open flame, Static discharge, Moisture

Incompatible materials: Oxidizing agents

Hazardous decomposition products: Carbon dioxide, Carbon monoxide, Hydrogen chloride, Silicon oxides

# TOXICOLOGICAL INFORMATION

RTECS Number: VV2000000

**Acute Toxicity:** 

ipr-mus LDLo:1000 mg/kg

Skin corrosion/irritation:

No data available

Serious eye damage/irritation:

No data available

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

No data available

Carcinogenicity:

No data available

IARC: No data available NTP: No data available OSHA: No data available

Reproductive toxicity:

No data available

Target organ(s): No data available

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** 

No data available Fish: No data available Crustacea: Algae: No data available

Persistence / degradability: Bioaccumulative potential(BCF):

Mobility in soil

No data available No data available

Log Pow: No data available Soil adsorption (Koc): No data available Henry's Law (PaM 3/mol): No data available

# 13. DISPOSAL CONSIDERATIONS

Disposal of product:

Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not

be allowed to enter the environment, drains, water ways, or the soil.

Dispose of as unused product. Do not re-use empty containers. Disposal of container:

Other considerations: Observe all federal, state and local regulations when disposing of the substance.

## 14. TRANSPORT INFORMATION

DOT (US)

UN number: Proper Shipping Name: Class or Division: Subrisk(s): Packing Group:

UN2925 Flammable solid, corrosive, organic, n.o.s 4.1 Flammable solid 8 Corrosive material II

<u>IATA</u>

WN number: Proper Shipping Name: Class or Division: Subrisk(s): Packing Group:

UN2925 Flammable solid, corrosive, organic, n.o.s 4.1 Flammable solid 8 Corrosive material II

<u>IMDG</u>

UN UN2925 Proper Shipping Name: Class or Division: Subrisk(s): Packing Group:

numb Flammable solid, corrosive, organic, n.o.s 4.1 Flammable solid 8 Corrosive material II

er:

**EmS number:** F-A, S-G

## 15. REGULATORY INFORMATION

# Toxic Substance Control Act (TSCA 8b.):

This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

## US Federal Regulations

**CERCLA Hazardous substance and Reportable Quantity:** 

SARA 313: Not Listed SARA 302: Not Listed

State Regulations

State Right-to-Know

Massachusetts
New Jersey
Pennsylvania
California Proposition 65:
Not Listed
Not Listed
Not Listed

Other Information

NFPA Rating: HMIS Classification:

Health:3Health:3Flammability:3Flammability:3Instability:1Physical:1

International Inventories

**Canada: NDSL** On NDSL **EC-No:** 242-042-4

# 16. OTHER INFORMATION

Revision date: 07/06/2018 Revision number: 1

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.