

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

SAFETY DATA SHEET

Version: v1

Revision Date: 2024-01-21

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : tert-Butyldimethylsilyl chloride solution
Product Number : B140635
Brand : aladdin
CAS-No. : 18162-48-6(Methylene Chloride)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances.

1.3 Company

Company : ALADDIN SCIENTIFIC CORPORATION
Address : 14078 Meridian Parkway,
Riverside, CA. 92518
Telephone : +1 (833) 552-7181
Fax : no data available

1.4 Emergency telephone number

CHEMTREC®, Inside the USA : 1-800-424-9300
CHEMTREC®, Outside the USA :

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquid (category 3), H226

Acute toxicity, oral (category 5), H303

Skin corrosion/irritation (category 1A), H314

Serious eye damage/eye irritation (Category 1), H318

Carcinogenicity (Category 2), H351

Specific target organ toxicity (single exposure) (Category 1), H370

Specific target organ toxicity (single exposure) (category 3), narcotic effects, H336

Specific target organ toxicity (repeated exposure) (Category 1), H372

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Acute (short-term) aquatic hazard (category 2), H401

Long-term aquatic hazard (category 2), H411

2.2 GHS Label elements, including precautionary statements

Pictogram



Danger

Signal word

Hazard statement(s)

H226	Flammable liquid and vapor
H303	May be harmful if swallowed
H314	Causes severe skin burns and eye damage
H336	May cause drowsiness or dizziness
H351	Suspected of causing cancer
H370	Causes damage to organs
H372	Causes damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects

Precautionary statement(s)

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surface, sparks, open flames and other ignition sources. - No smoking.
P202	Do not handle until all safety precautions have been read and understood.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting/...] equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash hands [and ...] thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P310	Immediately call a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN with water [or shower].
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

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P308+P311	IF exposed or concerned: Call a POISON CENTER/doctor/...
P370+P378	In case of fire: Use ... to extinguish.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Synonyms	: tert-Butylchlorodimethylsilane solution, tert-Butyldimethylchlorosilane, tert-Butyldimethylsilyl chloride, TBDMSCl solution
Formula	: C ₆ H ₁₅ ClSi
Molecular weight	: 150.72

Component	Classification	Concentration
Dichloromethane Standard		
CAS-No. : 75-09-2	Skin Irrit. 2; Eye Irrit. 2; Carc. 2; STOT SE 3; H315, H319, H351, H336	
EC-No. : 200-838-9	Concentration limits: 20 %: STOT SE 3, H336;	
tert-Butyldimethylsilyl chloride		
CAS-No. : 18162-48-6	Flammable solid category 1; acute toxicity category No 5; Skin corrosion/irritation category 1A; Serious eye damage/eye irritation category 1; Acute (short-term) aquatic hazards No. 2; Long-term aquatic hazard category 2; H228, H303, H314, H318, H401, H411	
EC-No. : 242-042-4		

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

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Flush eyes with water as a precaution.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water, Foam, Carbon dioxide (CO₂), Dry powder

Unsuitable extinguishing media

no data available

5.2 Special hazards arising from the substance or mixture

Carbon oxide Hydrogen chloride gas Silica is combustible. The vapor is heavier than air, so it can spread on the ground. Forms explosive mixtures with air at high temperatures. Hazardous gases or vapors may be generated in the event of a fire.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

6.2 Environmental precautions

Do not let the product enter the drain. Risk of explosion.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

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For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Operate under a fume hood. Do not inhale the substance/mixture. Avoid generating vapor or smoke. Keep away from open flames, hot surfaces and sources of ignition. Take measures to prevent electrostatic discharge. Change contaminated clothing immediately. Use skin protection lotion. Wash hands and face after using this substance. For preventive measures, see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep the container tightly closed and store in a dry and ventilated place. Keep away from heat and fire sources. Easy to hydrolyze.

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

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

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166(EU).

Skin protection

Gloves must be checked before use. Please use proper methods to remove the gloves (do not touch the outer surface of the gloves), and avoid any skin parts contacting the product. After use, please handle the contaminated gloves carefully according to relevant laws and regulations and effective laboratory rules and procedures. Please clean and blow dry the protective gloves selected for your hands must meet the specifications given in regulation (EU) 2016 / 425 and the en 374 standard derived from it.

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.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls.

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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).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	no data available
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	no data available
f) Initial boiling point and boiling range	no data available
g) Flash point	no data available
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapour pressure	no data available
l) Vapour density	no data available
m) Relative density	no data available
n) Water solubility	no data available
o) Partition coefficient: n-octanol/water	no data available
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties N	no data available
t) Oxidizing properties N	no data available

9.2 Other safety information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

no data available

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10.4 Conditions to avoid

heating.

10.5 Incompatible materials

Alkali, oxidizing agent, alkali metal, strong acid and base, strong oxidizing agent, metal, amine, vinyl compound, alcohol, aluminum, magnesium

10.6 Hazardous decomposition products

no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

mixture

Acute toxicity

Acute toxicity estimate Oral-5,000 mg/kg

(Calculation method)

Symptoms: Swallowing can cause severe burns to the mouth and throat, and there is a danger of perforation of the esophagus and stomach.

Symptoms: mucosal irritation, cough, shortness of breath, possible damage:, damage to the respiratory tract

Skin corrosion/irritation

The mixture can cause severe burns.

Serious eye damage/eye irritation

The mixture can cause serious eye damage. Danger of blindness!

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

The mixture may cause drowsiness or dizziness.

Aspiration hazard

no data available

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Additional Information

The substance has great damage to mucosal tissues and upper respiratory tract, eyes and skin. , Cramps, inflammation, sore throat, cramps, inflammation, bronchitis,

Pneumonia, pulmonary edema, burning sensation:, cough, wheezing, laryngitis, shortness of breath, headache, nausea

Other dangers cannot be ruled out.

This substance must be handled with special care.

Operate in accordance with good industrial hygiene and safety regulations.

SECTION 12: Ecological information

12.1 Toxicity

Component

Dichloromethane

Toxicity to fish flow-through test LC50-Pimephales promelas (fathead minnow)-193.00 mg/l-

96 h

Remarks: (ECHA)

No ridge to water flea and other aquatic species

Toxicity of Vertebral Animals

Static test LC50-Daphnia magna (Water flea)-27 mg/l-48 h

(US-EPA)

Toxicity to bacteria static test EC50-activated sludge-2,590 mg/l-40 minutes

(OECD Test Guideline 209)

Tert-Butyldimethylchlorosilane

No ridge to water flea and other aquatic species

Toxicity of Vertebral Animals

Static test EC50-Daphnia magna (Water flea)-6.49 mg/l-48 h

(OECD Test Guideline 202)

Toxicity to algae ErC50-Pseudokirchneriella subcapitata (green algae)-84 mg/l-72 h

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(OECD Test Guideline 201)

NOEC-Pseudokirchneriella subcapitata (green algae)-12.5 mg/l-72 h

(OECD Test Guideline 201)

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no data available

SECTION 13:

13.1 Disposal considerations

Product

recycle to process, if possible. Consult your local regional authorities and an expert of disposal. You may be able to dissolve or mix material with a combustible solvent and little by little burn in a chemical incinerator equipped with an afterburner and scrubber system. If a large amount of the substance is burned at a time, an explosion may occur.

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

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

UN number: 2920

Packing group: II

Class: 8 (3)

Proper shipping name: Corrosive liquid, Reportable Quantity(RQ): no data
flammable, n.o.s. (tert.-

Poison Inhalation Hazard: no data
available

butylchlorodimethylsilane,
Dichloromethane)

Environmental Hazards: No

IMDG

UN number: 2920

Packing group: II

EMS-No: no data available

Proper shipping name: Corrosive liquid, flammable, n.o.s. (tert.-butylchlorodimethylsilane, Dichloromethane)

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IATA

UN number: 2920

Packing group: II

Class: 8 (3)

Proper shipping name: Corrosive liquid, flammable, n.o.s. (tert.-butylchlorodimethylsilane, Dichloromethane)

SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

SECTION 16: Other information

Prepared By	Regulatory Affairs ALADDIN SCIENTIFIC CORPORATION Email: QualityAssurance@aladdinsci.com
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