

TERT-BUTYLDIMETHYLSILYL CHLORIDE FOR SYNTHESIS MSDS

CAS No: 18162-48-6 MSDS

MATERIAL SAFETY DATA SHEET (MSDS)

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

1.1. Product identifier

Product form : Substance
:
EC no : 242-042-4
CAS No : 18162-48-6
Product code : 2385D

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

LOBA CHEMIE PVT.LTD.
107 Wode House Road, Jehangir Villa, Colaba
400005 Mumbai - INDIA
T +91 22 6663 6663 - F +91 22 6663 6699
info@lobachemie.com - www.lobachemie.com

1.4. Emergency telephone number

Emergency number : + 91 22 6663 6663 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, H314
Category 1B
Flammable solids, H228
Category 2

Full text of classification categories and H statements : see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

C; R34
R10

Full text of R-phrases: see section 16

tert-BUTYLDIMETHYLSILYL CHLORIDE for Synthesis

Safety Data Sheet

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS05

GHS02

Signal word (CLP)

: Danger

Hazard statements (CLP)

: H228 - Flammable solid
H314 - Causes severe skin burns and eye damage

Precautionary statements (CLP)

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P280 - Wear protective gloves, protective clothing, eye protection, face protection
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a doctor

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name : tert-BUTYLDIMETHYLSILYL CHLORIDE for Synthesis
CAS No : 18162-48-6
EC no : 242-042-4

Full text of R- and H-phrases: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after skin contact : Get medical advice/attention. Wash with plenty of soap and water.

First-aid measures after eye contact : 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.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

tert-BUTYLDIMETHYLSILYL CHLORIDE for Synthesis

Safety Data Sheet

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Causes severe skin burns and eye damage.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Dry powder. Foam. Water spray.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable solid.

Explosion hazard : May form flammable/explosive vapour-air mixture.

5.3. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling : Do not breathe vapours. Keep away from sources of ignition - No smoking. Avoid contact with skin and eyes. Provide good ventilation in process area to prevent formation of vapour.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/... equipment. Comply with applicable regulations.

Storage conditions : Keep in fireproof place. Store in a well-ventilated place.

Incompatible materials : Heat sources.

tert-BUTYLDIMETHYLSILYL CHLORIDE for Synthesis

Safety Data Sheet

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Hand protection	: Protective gloves
Eye protection	: Chemical goggles or face shield
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: Wear respiratory protection

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Colorless to white crystals.
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 86 - 89 °C
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 22 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable Solid Flammable solid
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0.87 g/cm ³
Solubility	: Water: Insoluble
Log Pow	: No data available

tert-BUTYLDIMETHYLSILYL CHLORIDE for Synthesis

Safety Data Sheet

Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates : Corrosive vapours.

10.2. Chemical stability

Flammable solid. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Moisture. Air contact. Direct sunlight.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

May release flammable gases. Thermal decomposition generates : Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Skin corrosion/irritation : Causes severe skin burns and eye damage.

Serious eye damage/irritation : Serious eye damage, category 1, implicit

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

tert-BUTYLDIMETHYLSILYL CHLORIDE for Synthesis

Safety Data Sheet

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container to ...

Additional information : Handle empty containers with care because residual vapours are flammable.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 2925

UN-No. (IMDG) : 2925

UN-No.(IATA) : 2925

UN-No.(ADN) : 2925

UN-No. (RID) : 2925

14.2. UN proper shipping name

Proper Shipping Name (ADR) : FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S.

Proper Shipping Name (IMDG) : FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S.

Proper Shipping Name (IATA) : FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S.

Proper Shipping Name (ADN) : FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S.

Proper Shipping Name (RID) : FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S.

Transport document description (ADR) : UN 2925 FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S., 4.1 (8), II, (E)

Transport document description (IMDG) : UN 2925 FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S., 4.1 (8), II

Transport document description (IATA) : UN 2925 FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S., 4.1, II

Transport document description (ADN) : UN 2925 FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S., 4.1 (8), II

tert-BUTYLDIMETHYLSILYL CHLORIDE for Synthesis

Safety Data Sheet

Transport document description (RID) : UN 2925 FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S., 4.1 (8), II

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 4.1 (8)

Danger labels (ADR) : 4.1, 8



IMDG

Transport hazard class(es) (IMDG) : 4.1 (8)

Danger labels (IMDG) : 4.1, 8



IATA

Transport hazard class(es) (IATA) : 4.1 (8)

Hazard labels (IATA) : 4.1, 8



ADN

Transport hazard class(es) (ADN) : 4.1 (8)

Danger labels (ADN) : 4.1, 8



RID

Transport hazard class(es) (RID) : 4.1 (8)

Danger labels (RID) : 4.1, 8



14.4. Packing group

Packing group (ADR) : II

Packing group (IMDG) : II

Packing group (IATA) : II

Packing group (ADN) : II

tert-BUTYLDIMETHYLSILYL CHLORIDE for Synthesis

Safety Data Sheet

Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : FC1
Special provision (ADR) : 274
Limited quantities (ADR) : 1kg
Excepted quantities (ADR) : E2
Packing instructions (ADR) : P002, IBC06
Mixed packing provisions (ADR) : MP10
Portable tank and bulk container instructions (ADR) : T3
Portable tank and bulk container special provisions (ADR) : TP33
Tank code (ADR) : SGAN
Vehicle for tank carriage : AT
Transport category (ADR) : 2
Special provisions for carriage - Packages (ADR) : V11
Hazard identification number (Kemler No.) : 48
Orange plates :



Tunnel restriction code (ADR) : E
EAC code : 1W

- Transport by sea

Special provision (IMDG) : 274, 915
Limited quantities (IMDG) : 1 kg
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P002
IBC packing instructions (IMDG) : IBC06
IBC special provisions (IMDG) : B2
Tank instructions (IMDG) : T3
Tank special provisions (IMDG) : TP33
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-G
Stowage category (IMDG) : D
Stowage and handling (IMDG) : SW2
MFAG-No : 134

- Air transport

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y441
PCA limited quantity max net quantity (IATA) : 5kg
PCA packing instructions (IATA) : 445
PCA max net quantity (IATA) : 15kg

tert-BUTYLDIMETHYLSILYL CHLORIDE for Synthesis

Safety Data Sheet

CAO packing instructions (IATA)	: 448
CAO max net quantity (IATA)	: 50kg
Special provision (IATA)	: A3
ERG code (IATA)	: 3C

- Inland waterway transport

Classification code (ADN)	: FC1
Special provisions (ADN)	: 274
Limited quantities (ADN)	: 1 kg
Excepted quantities (ADN)	: E2
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 1

- Rail transport

Classification code (RID)	: FC1
Special provision (RID)	: 274
Limited quantities (RID)	: 1kg
Excepted quantities (RID)	: E2
Packing instructions (RID)	: P002, IBC06
Mixed packing provisions (RID)	: MP10
Portable tank and bulk container instructions (RID)	: T3
Portable tank and bulk container special provisions (RID)	: TP33
Tank codes for RID tanks (RID)	: SGAN
Transport category (RID)	: 2
Special provisions for carriage – Packages (RID)	: W1
Colis express (express parcels) (RID)	: CE10
Hazard identification number (RID)	: 48

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

tert-BUTYLDIMETHYLSILYL CHLORIDE for Synthesis is not on the REACH Candidate List

tert-BUTYLDIMETHYLSILYL CHLORIDE for Synthesis is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

tert-BUTYLDIMETHYLSILYL CHLORIDE for Synthesis

Safety Data Sheet

Denmark

Class for fire hazard	: Class II-1
Store unit	: 5 liter
Classification remarks	: R10 <H228;H314>; Emergency management guidelines for the storage of flammable liquids must be followed
Recommendations Danish Regulation	: Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

Flam. Sol. 2	Flammable solids, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
H228	Flammable solid
H314	Causes severe skin burns and eye damage
R10	Flammable
R34	Causes burns
C	Corrosive

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product