

Shanghai Aladdin Biochemical Technology Co., Ltd.  
No. 809, Chuhua Branch Road, Fengxian District, Shanghai

# SAFETY DATA SHEET

Version: v1  
Revision Date: 2024-01-31  
Print Date: 2024-02-07

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

### 1.1 Product identifiers

Product name : tert-Butylmagnesium Chloride  
Product Number : B107835  
Brand : aladdin  
CAS-No. : 677-22-5

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

Identified uses : Laboratory chemicals, Manufacture of substances.

### 1.3 Details of the supplier of the safety data sheet

Company : Shanghai Aladdin Biochemical Tech Co., Ltd  
Address : 36 Xinjinqiao Road, Shanghai  
Telephone : 400-620-6333  
Fax : no data available

### 1.4 Emergency telephone number


Emergency Phone : 0532-83889090

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

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

### 2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal word	Danger
Hazard statement(s)	
H225	Highly Flammable liquid and vapor
H261	In contact with water releases flammable gas
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H336	May cause drowsiness or dizziness
Precautionary statement(s)	
P210	Keep away from heat, hot surface, sparks, open flames and other ignition sources. - No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.

Shanghai Aladdin Biochemical Technology Co., Ltd.

No. 809, Chuhua Branch Road, Fengxian District, Shanghai

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P231+P232	Handle under inert gas/... Protect from moisture.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P422	Store contents under ...

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

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms	: Tert-butyl magnesium chloride; tert-butyl magnesium chloride; tert-butyl magnesium chloride
Formula	: C <sub>4</sub> H <sub>9</sub> ClMg
Molecular weight	: 116.87
CAS No.	: 677-22-5
EC-NO.	: no data available

Component	Classification	Concentration
tert-Butylmagnesium Chloride	no data available	2.0 M in diethyl ether

## SECTION 4: First aid measures

### 4.1 Description of 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

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a

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

no data available

### 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

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

Unsuitable extinguishing media

no data available

### 5.2 Special hazards arising from the substance or mixture

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

### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

### 5.4 Further information

no data available

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## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate  
<br/>personnel to safe areas.<br/>

### 6.2 Environmental precautions

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

### 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for  
<br/>disposal.<br/>

### 6.4 Reference to other sections

no data available

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.<br/>

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully  
resealed <br/>and kept upright to prevent leakage.<br/>

### 7.3 Specific end use(s)

Shanghai Aladdin Biochemical Technology Co., Ltd.  
No. 809, Chuhua Branch Road, Fengxian District, Shanghai

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

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin 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.

Body Protection

Complete suit protecting against chemicals, 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 full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) 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).

Control of environmental exposure

no data available

## 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	-40 °C
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available

Shanghai Aladdin Biochemical Technology Co., Ltd.

No. 809, Chuhua Branch Road, Fengxian District, Shanghai

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

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## 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

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

Bases, Alkali metals, Strong acids and strong bases, Strong oxidizing agents, Amines, Vinyl compounds, Aluminum, Magnesium

### 10.6 Hazardous decomposition products

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

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity

no data available

Skin corrosion/irritation

no data available

Shanghai Aladdin Biochemical Technology Co., Ltd.  
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Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Methylene chloride)NTP: Reasonably anticipated to be a human carcinogen (Methylene chloride)

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

no data available

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## SECTION 12: Ecological information

### 12.1 Toxicity

no data available

### 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

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## SECTION 13:

### 13.1 Disposal considerations

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#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

no data available

## SECTION 14: Transport information

#### DOT (US)

UN number: 3399

Packing group: I

Class: 4.3(3)

Proper shipping name:

Reportable Quantity(RQ): no data

Poison Inhalation Hazard: No

ORGANOMETALLIC SUBSTANCE,

available

LIQUID, WATER-REACTIVE,

FLAMMABLE (Tetrahydrofuran, tert-

Butylmagnesium chloride)

Environmental Hazards: No

#### IMDG

UN number: 3399

Packing group: I

EMS-No: no data available

Proper shipping name: ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE (Tetrahydrofuran, Butylmagnesium chloride)

#### IATA

UN number: 3399

Packing group: I

Class: 4.3(3)

Proper shipping name: ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE (Tetrahydrofuran, Butylmagnesium chloride)

## SECTION 15: Regulatory information

no data available

## SECTION 16: Other information

#### Further information

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