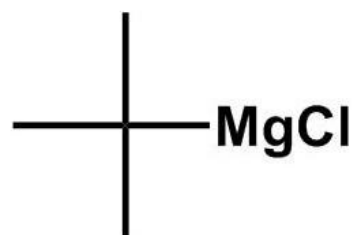


## TECHNICAL DATA SHEET

Date of Issue: 2025/02/25

# tert-Butylmagnesium Chloride, typ. 20 % solution in THF (typ. 1.7 M)



CAS-No.	677-22-5
EC-No.	211-638-6
REACH No.	01-2120102495-64-0000
Molecular formula	C <sub>4</sub> H <sub>9</sub> ClMg
Product number	10000296, 10001738, 10001739, 10001740, 10001741, 10006910

### APPLICATION

Grignard-reactions: reagent for the introduction of the tert-butyl group. As base for deprotonation reactions. Strong, weakly nucleophilic base for deprotonation reactions.

### SPECIFICATION

tert-Butylmagnesium Chloride: 19.0 – 21.0 %

### METHOD OF ANALYSIS

Determination of assay as total base by acidimetric titration after hydrolysis; detailed description available on request.

The information presented herein is believed to be accurate and reliable, but is presented without guarantee or responsibility on the part of Albemarle Corporation and its subsidiaries and affiliates. It is the responsibility of the user to comply with all applicable laws and regulations and to provide for a safe workplace. The user should consider any health or safety hazards or information contained herein only as a guide, and should take those precautions which are necessary or prudent to instruct employees and to develop work practice procedures in order to promote a safe work environment. Further, nothing contained herein shall be taken as an inducement or recommendation to manufacture or use any of the herein materials or processes in violation of existing or future patent.

Technical data sheets may change frequently. You can download the latest version from our website [www.albemarle.com](http://www.albemarle.com).

Please contact us at [www.albemarle.com/contact](http://www.albemarle.com/contact) with questions.

## PHYSICAL PROPERTIES

Appearance	liquid
Color	dark brown
Crystallization temperature	ca. 5 °C
Flash point	-21.2 °C 1,013 hPa (Tetrahydrofuran)
Boiling point/boiling range	65 °C at 1,013 hPa (Tetrahydrofuran)
Density	ca. 1.0 g/cm <sup>3</sup> at 20 °C
Water solubility	(Not applicable)
Molecular weight	116.87 g/mol
Thermal Stability	Crystallization below around 5 °C

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## HANDLING & STORAGE

Handling	tert.-Butylmagnesium chloride should only be handled under inert gas atmosphere. Avoid contact with eyes, skin and clothes as well as inhalation. Vapors may form explosive mixtures with air. Vapors are heavier than air and may spread along floors. Flash-back possible over considerable distance. Use only explosion-proof equipment. Take measures against electrostatic discharges. Protect from frost, heat and sunlight. Never add water, acids or oxidizing materials to the product. In case of fire use dry extinguishers on basis of sodium chloride or limestone powder. Never use water or CO <sub>2</sub> -extinguishers. Pay attention to the safety data sheet.
Storage	As material tends to crystallize at lower temperatures it should be stored above 10 °C. Precipitates can be redissolved by warming and appropriate homogenization. Keep container dry and tightly closed. When stored according to SDS the material is fairly stable. We still recommend to retest the material 6 month after date of analysis if included on CoA. If not included, use the date of manufacturing for the calculation.

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Product number: 10000296  
Date of Issue: 2025/02/25

## TRANSPORT & PACKAGING

UN number 3399

ADR	Class: 4.3	PG: I	Label: 4.3 (3)
RID	Class: 4.3	PG: I	Label: 4.3 (3)
IMDG	Class: 4.3	PG: I	Label: 4.3 (3)
IATA_C	Class: 4.3	PG: I	Packing instruction (cargo aircraft): 494
IATA_P	Class: 4.3	PG: I	

Hazard pictograms



Signal Word                      Danger

H&P Phrases                    See Safety Data Sheet

Labelling                         The labelling is according to EU-GHS classification ((EG) 1272/2008) and may vary in other countries. Please refer to the respective Safety Data Sheet for your country.

Packaging

Glass bottles of 500 and 1,000 mL. Steel bottles with volumes of 27, 450 and 2500 L. For safety reasons these are filled to a maximum of 90 %. Steel drum 200 L.

## OTHER INFORMATION

Further Related Documents                      Safety Data Sheet  
Our brochure(s)                                      Organomagnesium Compounds

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