

TECHNICAL DATA SHEET

Date of Issue: 2025/02/24

Methylmagnesium Chloride, typ. 22 % solution in THF (typ. 3 M)

CAS-No.	676-58-4
EC-No.	211-629-7
REACH No.	01-2119918291-43-0000
Molecular formula	CH ₃ ClMg
Product number	10000290, 10000506, 10001710, 10001711, 10001712, 10001713, 10001714, 10001715, 10001716, 10001717, 10001718, 10002125, 10004650

APPLICATION Grignard-reactions: reagent for the introduction of the methyl group.

SPECIFICATION

Methylmagnesium Chloride: 21.0 - 23.0 %

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.

Please contact us at www.albemarle.com/contact with questions.



PHYSICAL PROPERTIES

Appearance	liquid
Color	dark brown
Crystallization temperature	ca. 5 °C
Flash point	< 0 °C 1,013.3 hPa
Boiling point/boiling range	65 °C at 1,013 hPa (Tetrahydrofuran)
Density	1.02 g/cm ³ at 20 °C Method: OECD Test Guideline 109
Water solubility	(Not applicable)
Molecular weight	74.79 g/mol
Thermal Stability	crystallisation below around 5 °C

HANDLING & STORAGE

Handling	<p>Organomagnesium compounds should only be handled under inert gas (nitrogen or argon). Never add water, acids or oxidizing materials to the product. 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. Protect from frost, heat and sunlight.</p> <p>In case of fire use dry extinguishers on basis of sodium chloride or limestone powder. Never use water or CO₂-extinguishers. Pay attention to official safety regulations (see also: "Transport regulations" and "GHS Hazard Pictograms").</p>
Storage	<p>When stored according to SDS the material is fairly stable. We still recommend to retest the material 6 months after date of analysis if included on CoA. If not included, use the date of manufacturing for the calculation.</p> <p>As material tends to crystallize at lower temperatures, it should be stored above 10 °C. Keep container dry and tightly closed.</p>

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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 100, 250, 500 and 1,000 mL. Steel bottles with volumes of 7.4, 27, 125, 127, 450 and 2500 L. For safety reasons these are filled to a maximum of 90 %. Steel drums 30 and 200 L.

OTHER INFORMATION

Further Related Documents Safety Data Sheet

Our brochure(s) Organomagnesium Compounds

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