

# OTTO CHEMIE PVT LTD

An ISO 9001 : 2015 & GMP Certified Company  
101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate,  
Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel : + 91 98200 41841  
Email : [info@ottokemi.com](mailto:info@ottokemi.com) Web : [www.ottokemi.com](http://www.ottokemi.com)

Creation Date :- 19-05-2025

Revision Date :- 02-08-2030

## MATERIAL SAFETY DATA SHEET (MSDS)

### SECTION 1. Product identifiers

Product name: 4-Methylbenzylmagnesium chloride solution 0.5 M in THF  
Product Code: M 2720  
CAS No : 29875-07-8

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

Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification

OTTO CHEMIE PVT LTD

101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate,  
Chinchpada, Vasai East, Waliv, Maharashtra 401208.

Email [info@ottokemi.com](mailto:info@ottokemi.com)

1.4. Emergency telephone number

Phone no. : + 91 22 2207 0099 (9:00am - 6:00 pm)

### SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Flammable liquids, (Category 2)

Substances and mixtures which  
in contact with water emit

flammable gases, (Category 3)

Acute toxicity, (Category 4)

Skin corrosion, (Category 1B)

Carcinogenicity, (Category 2)

Specific target organ toxicity -

single exposure, (Category 3),

Respiratory system

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word

Hazard Statements

H225

H261

H302

H314

H335

H351

Precautionary Statements

P210

P231 + P232

P280

P370 + P378

P402 + P404

P403 + P235

Supplemental Hazard information (EU)

EUH019

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent,  
bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at  
levels of 0.1% or higher.

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.

H351: Suspected of causing cancer.

H335: May cause respiratory irritation.

Danger

Highly flammable liquid and vapor.

In contact with water releases flammable gas.

Harmful if swallowed.

Causes severe skin burns and eye damage.

May cause respiratory irritation.

Suspected of causing cancer.

Keep away from heat, hot surfaces, sparks, open flames and  
other ignition sources. No smoking.

Handle under inert gas. Protect from moisture.

Wear protective gloves/ protective clothing/ eye protection/ face  
protection.

In case of fire: Use dry powder or dry sand to extinguish.

Store in a dry place. Store in a closed container.

Store in a well-ventilated place. Keep cool.

May form explosive peroxides.

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## Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Reacts violently with water.

Reacts violently with water.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Formula : C<sub>8</sub>H<sub>9</sub>ClMg

Molecular weight : 164,92 g/mol

| Component                        | Classification                           | Concentration |
|----------------------------------|------------------------------------------|---------------|
| 4-Methylbenzylmagnesium chloride |                                          |               |
| CAS-No. 29875-07-8               | Water-react 3; Skin Corr. 1B; H261, H314 | >= 5 - < 10 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

#### If inhaled

After inhalation: fresh air. Call in physician.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist.

Remove contact lenses.

#### If swallowed

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

### 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

Carbon dioxide (CO<sub>2</sub>) Dry powder

Unsuitable extinguishing media

Water Foam

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

Carbon oxides

Hydrogen chloride gas

Magnesium oxide

Combustible.

Pay attention to flashback.

Vapors are heavier than air and may spread along floors.

May not get in touch with: Water

Development of hazardous combustion gases or vapours possible in the event of fire.

Forms explosive mixtures with air at ambient temperatures.

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## 5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

## 5.4 Further information

Remove container from danger zone and cool with water. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6: Accidental release measures

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

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition.

Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains. 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 carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

### 6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Keep workplace dry. Do not allow product to come into contact with water.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

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

Storage conditions

Tightly closed. Keep away from heat and sources of ignition.

Never allow product to get in contact with water during storage.

Storage stability Recommended storage temperature

2 - 8 °C

Handle and store under inert gas. Dry residue is explosive. Test for peroxide formation periodically and before distillation.

Storage class

Storage class (TRGS 510): 4.3: Hazardous materials, which set free flammable gases upon contact with water

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Ingredients with workplace control parameters

### 8.2 Exposure controls

Personal protective equipment

Eye/face protection

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

Skin protection

required

Body Protection

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Flame retardant antistatic protective clothing.

Respiratory protection

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type ABEK

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains. Risk of explosion.

## SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Physical state

b) Color

c) Odor

d) Melting

point/freezing point

e) Initial boiling point

and boiling range

f) Flammability (solid,  
gas)

g) Upper/lower  
flammability or  
explosive limits

h) Flash point

i) Autoignition  
temperature

j) Decomposition  
temperature

k) pH

l) Viscosity

m) Water solubility

n) Partition coefficient:  
n-octanol/water

o) Vapor pressure

p) Density

Relative density

q) Relative vapor  
density

r) Particle

characteristics

s) Explosive properties

t) Oxidizing properties

9.2 Other safety information

No data available

liquid

yellow

No data available

No data available

65 °C at 1.013 hPa

No data available

No data available

-17 °C - closed cup

No data available

No data available

No data available

Viscosity, kinematic: No data available

Viscosity, dynamic: No data available

No data available

No data available

No data available

0,918 g/cm<sup>3</sup>

No data available

No data available

No data available

Not classified as explosive.

none

## SECTION 10: Stability and reactivity

10.1 Reactivity

Formation of peroxides possible.

Vapors may form explosive mixture with air.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Warming.

Moisture.

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10.5 Incompatible materials  
Oxidizing agents, Oxygen  
10.6 Hazardous decomposition products  
Peroxides  
In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:

Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg

Inhalation LC50 Rat: > 50mg/L.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity

to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

Mixture

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

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Endocrine disrupting properties

Product:

Assessment :

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7 Other adverse effects

No data available

Components

Tetrahydrofuran

Toxicity to fish flow-through test LC50 - Pimephales promelas (fathead

minnow) - 2.160 mg/l - 96 h

(OECD Test Guideline 203)

Toxicity to daphnia

and other aquatic

invertebrates

static test EC50 - Daphnia magna (Water flea) - 3.485 mg/l -

48 h

(OECD Test Guideline 202)

Toxicity to

fish(Chronic toxicity)

flow-through test NOEC - Pimephales promelas (fathead

minnow) - 216 mg/l - 33 d

Remarks: (ECHA)

4-Methylbenzylmagnesium chloride

No data available

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## SECTION 13: Disposal considerations

13.1 Waste treatment methods  
No data available

## SECTION 14: Transport information

|                                   |                                                                                                                                             |             |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 14.1 UN number                    |                                                                                                                                             |             |
| ADR/RID: 2924                     | IMDG: 2924                                                                                                                                  | IATA: 2924  |
| 14.2 UN proper shipping name      |                                                                                                                                             |             |
| ADR/RID:                          | FLAMMABLE LIQUID, CORROSIVE, N.O.S. (4-Methylbenzylmagnesium chloride, Tetrahydrofuran) (4-Methylbenzylmagnesium chloride, Tetrahydrofuran) |             |
| IMDG:                             | FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Tetrahydrofuran, 4-Methylbenzylmagnesium chloride) (Tetrahydrofuran, 4-Methylbenzylmagnesium chloride) |             |
| IATA:                             | Flammable liquid, corrosive, n.o.s. (Tetrahydrofuran, 4-Methylbenzylmagnesium chloride) (Tetrahydrofuran, 4-Methylbenzylmagnesium chloride) |             |
| 14.3 Transport hazard class(es)   |                                                                                                                                             |             |
| ADR/RID: 3 (8)                    | IMDG: 3 (8)                                                                                                                                 | IATA: 3 (8) |
| 14.4 Packaging group              |                                                                                                                                             |             |
| ADR/RID: II                       | IMDG: II                                                                                                                                    | IATA: II    |
| 14.5 Environmental hazards        |                                                                                                                                             |             |
| ADR/RID: no                       | IMDG Marine pollutant: no                                                                                                                   | IATA: no    |
| 14.6 Special precautions for user |                                                                                                                                             |             |
| Tunnel restriction code :         | (D/E)                                                                                                                                       |             |
| Further information :             | No data available                                                                                                                           |             |

## SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture  
This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.  
Authorisations and/or restrictions on use  
National legislation  
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.  
P5c FLAMMABLE LIQUIDS  
Other regulations  
Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.  
Take note of Dir 94/33/EC on the protection of young people at work.  
15.2 Chemical Safety Assessment  
For this product a chemical safety assessment was not carried out

## SECTION 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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