

## 1 - Product and Company Information

ProductName 2,5-DIMETHYLPHENYLMAGNESIUM BROMIDE,  
0.5M SOLUTION IN TETRAHYDROFURAN (NO  
BULK SALES ALLOWED)

## 2 - Hazards Identification

### SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT

Reacts violently with water. May form explosive peroxides. Harmful if swallowed. Causes burns. Limited evidence of a carcinogenic effect. Extremely flammable.

## 3 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I
2,5-DIMETHYLPHENYLMAGNESIUM BROMIDE, 0.5M SOLUTION IN TETRAHYDROFURAN	None	None	None

Ingredient Name	Percent	CAS #	EC no	Annex I
TETRAHYDROFURAN 88.9 109-99-9 203-726-8 (Inhibitor free)				None

Symbols: F-Xi

R-Phrases: 11-19-36/37

Highly flammable. May form explosive peroxides. Irritating to eyes and respiratory system.

2,5-DIMETHYLPHENYLMAGNESIUM BROMIDE	None	None	None
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Formula	C8H9BrMg
Molecular Weight	209.4 AMU

## 4 - First Aid Measures

### AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

### AFTER SKIN CONTACT

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

### AFTER EYE CONTACT

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

### AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately. Do not induce vomiting.

## 5 - Fire Fighting Measures

### EXTINGUISHING MEDIA

Suitable: For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

### SPECIAL RISKS

Specific Hazard(s): Flammable liquid. Emits toxic fumes under fire conditions.

Explosion Hazards: Vapor may travel considerable distance to source of ignition and flash back. Container explosion may occur under fire conditions.

### SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

## 6 - Accidental Release Measures

### PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area. Shut off all sources of ignition. Use nonsparking tools.

### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

### METHODS FOR CLEANING UP

Cover with dry-lime, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

## 7 - Handling and Storage

### HANDLING

Directions for Safe Handling: Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

### STORAGE

Conditions of Storage: Keep tightly closed. Keep away from heat, sparks, and open flame. Handle and store under nitrogen.

Unsuitable: Do not allow water to enter container.

Store at 2-8°C

### SPECIAL REQUIREMENTS: Handle and store under inert gas. Air sensitive. Do not distill to dryness.

## 8 - Exposure Controls / Personal Protection

### ENGINEERING CONTROLS

Safety shower and eye bath. Use nonsparking tools. Use only in a chemical fume hood.

### GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Discard contaminated shoes. Wash thoroughly after handling.

### PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (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.

Hand Protection: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles.

Special Protective Measures: Faceshield (8-inch minimum).

## 9 - Physical and Chemical Properties

Appearance	Physical State: Liquid Color: Brown	At Temperature or Pressure
Property	Value	

pH N/A

BP/BP Range N/A

MP/MP Range N/A

Flash Point < - 17.0 °C Method: closed cup

Flammability N/A

Autoignition Temp N/A

Oxidizing Properties N/A

Explosive Properties N/A

Explosion Limits N/A

Vapor Pressure N/A

SG/Density 0.945 g/cm3

Partition Coefficient N/A

Viscosity N/A

Vapor Density N/A

Saturated Vapor Conc. N/A

Evaporation Rate N/A

Bulk Density N/A

Decomposition Temp. N/A

Solvent Content N/A

Water Content N/A

Surface Tension N/A

Conductivity N/A

Miscellaneous Data N/A

Solubility N/A

## 10 - Stability and Reactivity

### STABILITY

Stable: Stable.

Conditions of Instability: On exposure to air, tetrahydrofuran forms peroxides which can explode upon contact with strong base or metal hydrides when the peroxide concentration is greater than 0.5%.

Reactions to Avoid: Do not distill to dryness.

Conditions to Avoid: Do not allow water to enter container because of violent reaction. Air.

Materials to Avoid: Strong oxidizing agents.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Magnesium oxide, Hydrogen bromide gas.

### HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

## 11 - Toxicological Information

### SIGNS AND SYMPTOMS OF EXPOSURE

Effects: Coughing, chest pains, difficulty in breathing. Material is extremely reactive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Inhalation may result in respiratory irritation and edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema.

Symptoms of exposure, shortness of breath, headache, nausea, and vomiting. Can cause CNS depression. Exposure can cause:

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SG/Density 0.945 g/cm3

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