

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Magnesium, turnings acc. to Grignard, 50 g

Print date: 14.04.2015

Product code: 9991576

Page 1 of 8

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

##### 1.1. Product identifier

Magnesium, turnings acc. to Grignard, 50 g

CAS No: 7439-95-4

EC No: 231-104-6

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

###### Use of the substance/mixture

Laboratory chemicals

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

###### Seller

Company name: CONATEX-DIDACTIC Lehrmittel GmbH

Street: Im Forstgarten 1

Place: D-66459 Kirkel

Internet: www.conatex.com

###### Supplier

Company name: Carbolution Chemicals GmbH

Street: Im Stadtwald, Gebäude A1.2

Place: D-66123 Saarbrücken

Contact person: Dr. Michael Bauer Telephone: +49 (0)681 302-71232

e-mail: michael.bauer@carbolution-chemicals.de

Internet: www.carbolution-chemicals.de

##### 1.4. Emergency telephone number: +49 (0)681 302-71232

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Classification according to Directive 67/548/EEC or 1999/45/EC

Indications of danger: F - Highly flammable

R phrases:

Highly flammable.

Contact with water liberates extremely flammable gases.

###### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard categories:

Flammable solid: Flam. Sol. 1

Substance or mixture which in contact with water emits flammable gas: Water-react. 2

Hazard Statements:

Flammable solid.

In contact with water releases flammable gases.

##### 2.2. Label elements

Signal word: Danger

Pictograms: GHS02



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Magnesium, turnings acc. to Grignard, 50 g

Print date: 14.04.2015

Product code: 9991576

Page 2 of 8

#### Hazard statements

H228 Flammable solid.  
H261 In contact with water releases flammable gases.

#### Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P240 Ground/bond container and receiving equipment.  
P370+P378 In case of fire: Use Extinguishing powder. Dry sand. to extinguish.

#### 2.3. Other hazards

No information available.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Sum formula: Mg  
Molecular weight: 24,31

#### Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
231-104-6	Magnesium	100 %
7439-95-4	F - Highly flammable R11-15	
	Flam. Sol. 1, Water-react. 2; H228 H261	

Full text of R-, H- and EUH-phrases: see section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### After inhalation

Provide fresh air.

##### After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

##### After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

##### After ingestion

Rinse mouth immediately and drink plenty of water.

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

No information available.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

##### Suitable extinguishing media

D -powder, Dry sand, Cement.

##### Unsuitable extinguishing media

Water, Foam.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Magnesium, turnings acc. to Grignard, 50 g

Print date: 14.04.2015

Product code: 9991576

Page 3 of 8

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

Flammable. Vapours can form explosive mixtures with air. Danger of spontaneous combustion.

#### **5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

#### **Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

### SECTION 6: Accidental release measures

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

Remove all sources of ignition.

#### **6.2. Environmental precautions**

Do not allow uncontrolled discharge of product into the environment. Danger of explosion

#### **6.3. Methods and material for containment and cleaning up**

Take up carefully when dry. Treat the recovered material as prescribed in the section on waste disposal.

#### **6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

### SECTION 7: Handling and storage

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

Avoid contact with water. Never add water to this product. If handled uncovered, arrangements with local exhaust ventilation have to be used.

##### **Advice on protection against fire and explosion**

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air. Only use the material in places where open light, fire and other flammable sources can be kept away.

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

##### **Requirements for storage rooms and vessels**

Keep container dry. Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

##### **Advice on storage compatibility**

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.

#### **7.3. Specific end use(s)**

none

### SECTION 8: Exposure controls/personal protection

#### **8.1. Control parameters**

#### **8.2. Exposure controls**

##### **Protective and hygiene measures**

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

##### **Eye/face protection**

Wear eye/face protection.

##### **Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Magnesium, turnings acc. to Grignard, 50 g

Print date: 14.04.2015

Product code: 9991576

Page 4 of 8

the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

#### Skin protection

Flame-retardant protective clothing. Wear anti-static footwear and clothing

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state: solid  
Colour: silver grey

#### Test method

pH-Value: not determined

#### Changes in the physical state

Melting point: 648 °C

Initial boiling point and boiling range: 1090 °C

Flash point: not applicable

#### Flammability

Solid: not determined

Gas: not applicable

Lower explosion limits: not determined

Upper explosion limits: not determined

#### Auto-ignition temperature

Solid: not determined

Gas: not applicable

Decomposition temperature: not determined

#### Oxidizing properties

Not oxidizing.

Vapour pressure: 1 hPa  
(at 621 °C)

Density (at 25 °C): 1,74 g/cm<sup>3</sup>

Water solubility: insoluble

#### Solubility in other solvents

not determined

Partition coefficient: not determined

Vapour density: not determined

Evaporation rate: not determined

### 9.2. Other information

Solid content: not determined

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reacts violently with water. Flammable, Ignition hazard.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Magnesium, turnings acc. to Grignard, 50 g

Print date: 14.04.2015

Product code: 9991576

Page 5 of 8

#### **10.2. Chemical stability**

Decomposes in contact with water.

#### **10.3. Possibility of hazardous reactions**

No known hazardous reactions.

#### **10.4. Conditions to avoid**

Formation of explosive mixtures with: Water. Ignition hazard. Keep away from heat. Remove all sources of ignition. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

#### **10.5. Incompatible materials**

Protect from moisture. Never add water to this product. Keep away from: Material, oxygen-rich, oxidizing.

#### **10.6. Hazardous decomposition products**

In contact with water releases flammable gases.

### SECTION 11: Toxicological information

#### **11.1. Information on toxicological effects**

##### **Acute toxicity**

Toxicological data are not available.

##### **Carcinogenic/mutagenic/toxic effects for reproduction**

Due to missing data no statement can be made whether the substance fulfills the criteria of CMR categories 1 or 2. Practical experiences do not give any evidence for CMR activity of categories 1 or 2.

##### **Additional information on tests**

This mixture is classified as hazardous according to 1999/45/EC.

### SECTION 12: Ecological information

#### **12.1. Toxicity**

The product is not: Ecotoxic.

#### **12.2. Persistence and degradability**

Decomposes in contact with water.

#### **12.3. Bioaccumulative potential**

The product has not been tested.

#### **12.4. Mobility in soil**

The product has not been tested.

#### **12.5. Results of PBT and vPvB assessment**

The product has not been tested.

#### **12.6. Other adverse effects**

No information available.

#### **Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

### SECTION 13: Disposal considerations

#### **13.1. Waste treatment methods**

##### **Advice on disposal**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

##### **Contaminated packaging**

Avoid contact with water. Dispose of waste according to applicable legislation.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Magnesium, turnings acc. to Grignard, 50 g**

Print date: 14.04.2015

Product code: 9991576

Page 6 of 8

**SECTION 14: Transport information****Land transport (ADR/RID)**

<b>14.1. UN number:</b>	UN1869
<b>14.2. UN proper shipping name:</b>	MAGNESIUM in pellets, turnings or ribbons
<b>14.3. Transport hazard class(es):</b>	4.1
<b>14.4. Packing group:</b>	III
Hazard label:	4.1
Classification code:	F3
Special Provisions:	59
Limited quantity:	5 kg
Transport category:	3
Hazard No:	40
Tunnel restriction code:	E

**Other applicable information (land transport)**

E1

**Inland waterways transport (ADN)**

<b>14.1. UN number:</b>	UN1869
<b>14.2. UN proper shipping name:</b>	MAGNESIUM in pellets, turnings or ribbons
<b>14.3. Transport hazard class(es):</b>	4.1
<b>14.4. Packing group:</b>	III
Hazard label:	4.1
Classification code:	F3
Special Provisions:	59
Limited quantity:	5 kg

**Other applicable information (inland waterways transport)**

E1

**Marine transport (IMDG)**

<b>14.1. UN number:</b>	UN1869
<b>14.2. UN proper shipping name:</b>	MAGNESIUM in Form von Pellets, Spänen oder Bändern
<b>14.3. Transport hazard class(es):</b>	4.1
<b>14.4. Packing group:</b>	III
Hazard label:	4.1
Special Provisions:	59, 920
Limited quantity:	5 kg
EmS:	F-G, S-G

**Other applicable information (marine transport)**

E1

**Air transport (ICAO)**

<b>14.1. UN number:</b>	UN1869
<b>14.2. UN proper shipping name:</b>	MAGNESIUM in Form von Pellets, Spänen oder Bändern
<b>14.3. Transport hazard class(es):</b>	4.1
<b>14.4. Packing group:</b>	III
Hazard label:	4.1
Special Provisions:	A15
Limited quantity Passenger:	10 kg

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Magnesium, turnings acc. to Grignard, 50 g

Print date: 14.04.2015

Product code: 9991576

Page 7 of 8

IATA-packing instructions - Passenger:	446
IATA-max. quantity - Passenger:	25 kg
IATA-packing instructions - Cargo:	449
IATA-max. quantity - Cargo:	100 kg

**Other applicable information (air transport)**

E1  
: Y443

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

**14.6. Special precautions for user**

Warning: Flammable solids.

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

not applicable

## SECTION 15: Regulatory information

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
**EU regulatory information**
**Additional information**

To follow: 850/2004/EC , 79/117/EEC , 689/2008/EC

**National regulatory information**

Employment restrictions:	Observe employment restrictions for young people.
Water contaminating class (D):	3 - highly water contaminating

**15.2. Chemical safety assessment**

For this substance a chemical safety assessment has not been carried out.

## SECTION 16: Other information

**Abbreviations and acronyms**

ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road )  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service  
 LC50: Lethal concentration, 50%  
 LD50: Lethal dose, 50%

**Relevant R-phrases (Number and full text)**

11	Highly flammable.
15	Contact with water liberates extremely flammable gases.

**Relevant H- and EUH-phrases (Number and full text)**

H228	Flammable solid.
H261	In contact with water releases flammable gases.

**Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### **Magnesium, turnings acc. to Grignard, 50 g**

Print date: 14.04.2015

Product code: 9991576

Page 8 of 8

for the new made-up material.