

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Aluminum, powder, 50 g**

Print date: 14.04.2015

Product code: 9991043

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Aluminum, powder, 50 g

CAS No: 7429-90-5  
Index No: 013-002-00-1  
EC No: 231-072-3

**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:  
Substance or mixture which in contact with water emits flammable gas: Water-react. 2  
Flammable solid: Flam. Sol. 1  
Hazard Statements:  
In contact with water releases flammable gases.  
Flammable solid.

**2.2. Label elements****Hazardous components which must be listed on the label**  
aluminium powder (stabilised)

Signal word: Danger  
Pictograms: GHS02

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#### 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.  
P370+P378 In case of fire: Use dry sand to extinguish.  
P402+P404 Store in a dry place. Store in a closed container.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Sum formula: Al  
Molecular weight: 26,98

#### 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]	
231-072-3	aluminium powder (stabilised)	100 %
7429-90-5	F - Highly flammable R11-15	
013-002-00-1	Water-react. 2, Flam. Sol. 1; H261 H228	

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

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

##### 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.

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

No data available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

##### Suitable extinguishing media

D -powder, Dry sand, Cement.

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#### Unsuitable extinguishing media

Water, Foam.

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

Combustible. 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

Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

### 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.

### 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.

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

Keep away from sources of ignition. - No smoking. Do not allow contact with air. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

#### 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: Material, oxygen-rich, oxidizing. Pyrophoric or self-heating substances.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
7429-90-5	Aluminium metal, respirable dust	-	4		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

#### 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

Eye protection: Tightly sealed safety glasses. German Industry Norms (DIN) / European Norms (EN): DIN EN 166

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#### Hand protection

Hand protection: Single-use gloves. Before using check leak tightness / impermeability. Use gloves only once. German Industry Norms (DIN) / European Norms (EN): DIN EN 374

#### Skin protection

Body protection: Lab apron. Only wear fitting, comfortable and clean protective clothing.

#### Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Suitable respiratory protective equipment: particulates filter device (DIN EN 143).

## SECTION 9: Physical and chemical properties

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

Physical state:	solid
Colour:	silver grey
Odour:	No data available

#### Test method

pH-Value: No data available

#### Changes in the physical state

Melting point:	660 °C
Initial boiling point and boiling range:	2519 °C
Sublimation point:	No data available
Softening point:	No data available
Flash point:	No data available

#### Flammability

Solid:	No data available
Gas:	No data available
Lower explosion limits:	No data available
Upper explosion limits:	No data available
Ignition temperature:	400 °C

#### Auto-ignition temperature

Solid:	No data available
Gas:	No data available
Vapour pressure:	No data available
Vapour pressure:	No data available
Density (at 20 °C):	2,7 g/cm <sup>3</sup>
Water solubility:	No data available
Partition coefficient:	No data available
Viscosity / dynamic:	No data available
Viscosity / kinematic:	No data available
Flow time:	No data available
Vapour density:	No data available
Evaporation rate:	No data available
Solvent separation test:	No data available
Solvent content:	No data available

### 9.2. Other information

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Solid content:

No data available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No data available

**10.3. Possibility of hazardous reactions**

No data available

**10.4. Conditions to avoid**

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Ignition hazard. Vapours can form explosive mixtures with air. No data available

**10.5. Incompatible materials**

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

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Toxicokinetics, metabolism and distribution**

Toxicological data are not available.

**Acute toxicity**

Toxicological data are not available.

**Irritation and corrosivity**

Harmful if inhaled. Harmful if swallowed. Harmful in contact with skin. Frequently or prolonged contact with skin may cause dermal irritation. Risk of serious damage to eyes.

**Sensitising effects**

No data available

**Severe effects after repeated or prolonged exposure**

No data 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.

**Specific effects in experiment on an animal**

No data available

**Additional information on tests**

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

**Practical experience****Observations relevant to classification**

No data available

**SECTION 12: Ecological information****12.1. Toxicity**

No data available

**12.2. Persistence and degradability**

Decomposes in contact with water.

**12.3. Bioaccumulative potential**

No data available

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**12.4. Mobility in soil**

No data available

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

No data available

**12.6. Other adverse effects**

No data available

**Further information**

According to the criteria of the European classification and labelling system, the substance/the product has not to be labelled as "dangerous for the environment".

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Advice on disposal**

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

**Waste disposal number of waste from residues/unused products**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals  
Classified as hazardous waste.

**Waste disposal number of used product**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals  
Classified as hazardous waste.

**Waste disposal number of contaminated packaging**

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances  
Classified as hazardous waste.

**Contaminated packaging**

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

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

**14.1. UN number:** UN 1309  
**14.2. UN proper shipping name:** ALUMINIUM POWDER, COATED  
**14.3. Transport hazard class(es):** 4.1  
**14.4. Packing group:** III  
Hazard label: 4.1  
Classification code: F3  
Limited quantity: 5 kg  
Transport category: 3  
Hazard No: 40  
Tunnel restriction code: E

**Other applicable information (land transport)**

E1

**Inland waterways transport (ADN)**

**14.1. UN number:** UN 1309

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**14.2. UN proper shipping name:** ALUMINIUM POWDER, COATED

**14.3. Transport hazard class(es):** 4.1

**14.4. Packing group:** III

Hazard label: 4.1

Classification code: F3

Limited quantity: 5 kg

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

E1

**Marine transport (IMDG)**

**14.1. UN number:** UN 1309

**14.2. UN proper shipping name:** ALUMINIUM POWDER, COATED

**14.3. Transport hazard class(es):** 4.1

**14.4. Packing group:** III

Hazard label: 4.1

Special Provisions: 223

Limited quantity: 5 kg

EmS: F-G, S-G

**Other applicable information (marine transport)**

E1

**Air transport (ICAO)**

**14.1. UN number:** UN 1309

**14.2. UN proper shipping name:** ALUMINIUM POWDER, COATED

**14.3. Transport hazard class(es):** 4.1

**14.4. Packing group:** III

Hazard label: 4.1

Special Provisions: A3

Limited quantity Passenger: 10 kg

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

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

**EU regulatory information**

**Additional information**

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

**National regulatory information**

Water contaminating class (D): - - not water contaminating

## SECTION 16: Other information

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#### 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.