

EC safety data sheet



Trade name: ALUMINIUM PASTE EMR-D-767E

Product no.: EMR-D767E

Version: 2.0.0 / GB

Status: 17.12.2010

1.) Identification of the substance/mixture and of the company/undertaking

Trade name

ALUMINIUM PASTE EMR-D-767E

Details of the supplier of the safety data sheet

Address

Toyal Europe
Route de Lescun
F-64490 ACCOUS

Telephone no. +33 (0)5 59 98 35 35

Fax no. +33 (0)5 59 98 35 36

Information provided by / telephone

+33 (0)5 59 98 35 35

Emergency telephone

For medical advice:

+33 (0)1 40 05 48 48 (Anti Poison Center Paris)

In case of transport incidents and other emergencies:

+44 (0)1865 407333 (NCEC, National Chemical Emergency Centre)

Advice on Safety Data Sheet

reach@toyol-europe.com

sdb_info@umco.de

2.) Hazards identification

Classification of the substance or mixture

Classification in accordance with Regulation 67/548/EEC or 1999/45/EC

F; R11

R67

Label elements

Labelling according to Directive 1999/45/CE

Hazard symbols



Highly flammable

R phrases

11

Highly flammable.

67

Vapours may cause drowsiness and dizziness.

S phrases

7/8

Keep container tightly closed and dry.

43.10

In case of fire, use dry sand or metal fire powder. --- Never use water.

3.) Composition / information on ingredients

Chemical characterization

Aluminium powder pasted in solvents

Hazardous ingredients

1-METHOXY-2-PROPANOL

EC no. 203-539-1 Index no. 603-064-00-3 CAS no. 107-98-2

Concentration > 30 %-b.w. < 50

Classification R10 R67

Hazard symbols - R phrases 10-67

Aluminium powder (stabilised)

EC no. 231-072-3 Index no. 013-002-00-1 CAS no. 7429-90-5

Concentration > 30 %-b.w. < 50

Classification F; R11 F; R15

Hazard symbols F R phrases 11-15

2-methoxypropanol

EC no. 216-455-5 Index no. 603-106-00-0 CAS no. 1589-47-5

Concentration < 0,5 %-b.w.

Classification R10 Repr.Cat.2; R61 Xi; R41 Xi; R37/38

Hazard symbols T R phrases 61-10-37/38-41

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silicon dioxide, chemically prepared

EC no.	231-545-4	Index no.	-	CAS no.	7631-86-9
Concentration	> 7,5	<	10,5	%-b.w.	
Classification	-				
Hazard symbols	-	R phrases	-		

4.) First aid measures

General information

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air.

After skin contact

Wash off immediately with soap and water.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Seek medical assistance.

After ingestion

Rinse mouth thoroughly with water. Do not induce vomiting. Summon a doctor immediately. Never give anything by mouth to an unconscious person.

5.) Fire-fighting measures

Suitable extinguishing media

Dry sand; Metal fire powders

Extinguishing media that must not be used for safety reasons

Water; Carbon dioxide; Dry powder; Foam; Halones

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

In case of contact with acidic or alkaline (basic) media as well as water, aluminium powder will react under hydrogen formation.

Special protective equipment for fire-fighters

Use self-contained breathing apparatus. Wear protective clothing.

Other information

Do not break burning matter - danger of explosion!

6.) Accidental release measures

Personal precautions

Refer to protective measures listed in sections 7 and 8. Keep away sources of ignition.

Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

Methods for cleaning up/taking up

Scoop-up mechanically. Protect from water. When picked up, treat material as prescribed under heading "Disposal considerations".

Additional informations (chapter 6)

Do not collect residues using a non explosion-proof vacuum cleaner – Explosion hazard!

7.) Handling and storage

Handling

Advice on safe handling

Provide good ventilation of working area (local exhaust ventilation, if necessary). Avoid the formation and deposition of dust.

Product inherent handling risks must be minimised taking the appropriate measures for protection and preventive actions. The working process should be designed to rule out the release of hazardous substances or skin contact as far it is possible by the state of the art.

Advice on protection against fire and explosion

Vapours can form an explosive mixture with air. Take precautionary measures against static charges. Keep away from sources of heat and ignition. Use explosion-proof equipment/fittings and non-sparking tools.

Storage

Requirements for storage rooms and vessels

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep only in the original container.

Advice on storage assembly

Do not store together with: Oxidizing agents; Acids; Alkalies; Nitrates; Alcohols; Halogenated hydrocarbons; Halogens; Keep away from water.

Further information on storage conditions

Keep container tightly closed in a cool, well-ventilated place. Keep dry. Humidity penetration (water) into closed containers may lead to pressure increase and bursting of the container.

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8.) Exposure controls / personal protection

Exposure limit values

1-METHOXY-2-PROPANOL

CAS no. 107-98-2
EC no. 203-539-1

2000/39/EWG

1-Methoxypropanol-2

TWA	375	mg/m ³	100	ml/m ³
STEL	568	mg/m ³	150	ml/m ³
Skin resorption / sensibilisation	Skin			

List of approved workplace exposure limits (WELs) / EH40

1-Methoxypropan-2-ol

TWA	375	mg/m ³	100	ml/m ³
STEL	560	mg/m ³	150	ml/m ³
Skin resorption / sensibilisation	Sk			

Aluminium powder (stabilised)

CAS no. 7429-90-5
EC no. 231-072-3

List of approved workplace exposure limits (WELs) / EH40

Aluminium metal

total inhalable dust

TWA	10	mg/m ³		
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List of approved workplace exposure limits (WELs) / EH40

Aluminium metal

respirable dust

TWA	4	mg/m ³		
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silicon dioxide, chemically prepared

CAS no. 7631-86-9
EC no. 231-545-4

List of approved workplace exposure limits (WELs) / EH40

Silica, amorphous

inhalable dust

TWA	6	mg/m ³		
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List of approved workplace exposure limits (WELs) / EH40

Silica, amorphous

respirable dust

TWA	2,4	mg/m ³		
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Exposure controls

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust, aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective glove should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Eye protection

Safety glasses with side protection shield (EN 166)

Skin protection

Normal chemical work clothing.

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin. Do not inhale vapours. Provide eye wash fountain in work area. Have emergency shower available.

9.) Physical and chemical properties

General information

Form	pasty
Colour	silver-grey
Odour	solvent-like

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Important health, safety and environmental information

Changes in physical state

Type	Melting point		
Value	appr.	660	°C
Reference substance	aluminium		
Type	Boiling temperature		
Value		2467	°C
Reference substance	aluminium		

Flash point

Value		31	°C
Reference substance	1-methoxy-2-propanol		

Ignition temperature

Value		287	°C
Reference substance	1-methoxy-2-propanol		

Explosion limits

Upper explosion limit		13,74	% vol
Reference substance	1-methoxy-2-propanol		
Lower explosion limit		1,47	% vol
Reference substance	1-methoxy-2-propanol		

Vapour pressure

Value		11,5	hPa
Reference temperature	20	°C	
Reference substance	1-methoxy-2-propanol		

Density

Value		1,40	g/cm ³
Source	calculated value		
Reference substance	Product		
Reference temperature	20	°C	

Solubility in water

Remarks insoluble

Flammability :

Flammability : Highly flammable according to method EC A.10 (flammability, solids)

10.) Stability and reactivity

Conditions to avoid

Moisture; Heat; Exothermic reactions are possible in the event of contact with incompatible substances.

Materials to avoid

Oxidizing agents; Acids; Alkalies; Nitrates; Alcohols; Halogenated hydrocarbons; Halogens; Water

Hazardous decomposition products

In case of contact with acidic or alkaline (basic) media as well as water, aluminium powder will react under hydrogen formation.

11.) Toxicological information

Acute toxicity

Acute oral toxicity

LD50		6600	mg/kg
Species	rat		
Reference substance	1-methoxy-2-propanol		
Source	RTECS		

Acute dermal toxicity

LD50		13	g/kg
Species	rabbit		
Reference substance	1-methoxy-2-propanol		
Source	RTECS		

Effects after repeated or prolonged exposition (subacute, subchronic, chronic)

Mutagenicity

No experimental information on genotoxicity available.

Reproduction toxicity

No experimental information on reproduction toxic effects available.

Carcinogenicity

No experimental information on carcinogenic effects available.

Experience in practice

Repeated and prolonged skin contact may cause removal of natural fat from the skin and irritation of the skin. Inhalation of solvent vapours in higher concentration may lead to nausea, headache, drowsiness and dizziness.

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Other information (chapter 11.)

Product specific toxicological data are not known.

12.) Ecological information

Other information

Ecological data are not available. Do not discharge product unmonitored into the environment.

13.) Disposal considerations

Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

14.) Transport information

Transport ADR/RID/ADN

Class	4.1
Classification code	F1
Packing group	II
Hazard identification no.	40
UN number	1325
Technical name	FLAMMABLE SOLID, ORGANIC, N.O.S.
Danger releasing substance	1-METHOXY-2-PROPANOL Aluminium powder (stabilised)
Tunnel restriction code	E
Label	4.1

Transport IMDG

Class	4.1
Packing group	II
UN number	1325
Proper shipping name	FLAMMABLE SOLID, ORGANIC, N.O.S.
Danger releasing substance	1-METHOXY-2-PROPANOL Aluminium powder (stabilised)
EmS	F-A+S-G
Label	4.1

Transport ICAO/IATA

Class	4.1
Packing group	II
UN number	1325
Proper shipping name	Flammable solid, organic, n.o.s.
Danger releasing substance	1-METHOXY-2-PROPANOL Aluminium powder (stabilised)
Label	4.1

15.) Regulatory information

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

EU regulations

Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances

Remarks Annex I, part 1 + 2: not mentioned. With regard to possibly appropriate decomposition products see Chapter 10.

16.) Other information

Sources of key data used to compile the data sheet:

EC Directive 67/548/EC resp. 99/45/EC as amended in each case.
Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.
EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EC
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

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Relevant R-phrases (chapter 3):

- | | |
|-------|---|
| 10 | Flammable. |
| 11 | Highly flammable. |
| 15 | Contact with water liberates extremely flammable gases. |
| 37/38 | Irritating to respiratory system and skin. |
| 41 | Risk of serious damage to eyes. |
| 61 | May cause harm to the unborn child. |
| 67 | Vapours may cause drowsiness and dizziness. |

Department issuing safety data sheet

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This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.