



Safety Data Sheet
Silica coated aluminium paste
Alp EMR

Safety Data Sheet dated 01-06-2012, version 1.1

In compliance with the requirement of the Regulation (EC) N°1907/2006.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Mixture identification:

Trade name:

Silica coated aluminium paste

MSDS Code:

Alp EMR

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

Recommended use:

Manufacture of plastics

Manufacture of inks

Metallic paint (for automotive industry and industrial use)

1.3. Details of the supplier of the safety data sheet

Company:

TOYAL EUROPE

Route de Lescun

F-64490 ACCOUS

Telephone (office hours): +33 (0)5 59 98 35 35

Fax: +33 (0)5 59 98 35 36

Competent person responsible for the safety data sheet:

reach@toyal-europe.com

1.4. Emergency telephone number

In case of transport accident or other emergency: Emergency CONTACT (24-Hour-Number):

GBK/Infotrac ID 103679: (USA domestic) 1 800 535 5053 or international (001) 352 323 3500.

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols:

F Highly flammable

R Phrases:

R11 Highly flammable.

R67 Vapours may cause drowsiness and dizziness.

EC regulation criteria 1272/2008 (CLP)

Flam. Sol. 1, Flammable solid.

STOT SE 3, May cause drowsiness or dizziness.

Adverse physicochemical, human health and environmental effects:

No other hazards.

2.2. Label elements

Symbols:

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Danger

Hazard statements:

H228 Flammable solid.

H336 May cause drowsiness or dizziness.

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P271 Use only outdoors or in a well-ventilated area.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P370+P378 P370+P378.2

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None.

2.3. Other hazards

vPvB Substances: None - PBT Substances: None.

Other Hazards:

No other hazards.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not Relevant.

3.2. Mixtures

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:

35% - 75% aluminium powder (stabilised)

Index number: 013-002-00-1, CAS: 7429-90-5, EC: 231-072-3

F; R11-15

Water-react. 2 H261

Flam. Sol. 1 H228

20% - 60% 1-methoxy-2-propanol; monopropylene glycol methyl ether

REACH No.: 01-2119457435-35-XXXX, Index number: 603-064-00-3, CAS: 107-98-2, EC:

203-539-1

R10-67; substance with a Community workplace exposure limit

Flam. Liq. 3 H226

STOT SE 3 H336

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:



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- Remove casualty to fresh air and keep warm and at rest.
- 4.2. Most important symptoms and effects, both acute and delayed
None.
- 4.3. Indication of any immediate medical attention and special treatment needed
Treatment:
None.

SECTION 5. FIRE-FIGHTING MEASURES

- 5.1. Extinguishing media
Suitable extinguishing media:
Dry sand
Metal fire powder
Extinguishing media which must not be used for safety reasons:
Water
CO₂
Alcohol foam
Halons
Dry powder
- 5.2. Special hazards arising from the substance or mixture
Do not inhale explosion and combustion gases.
In case of contact with acid or alkaline (as well as water), aluminum powder will react and emission of hydrogen will occur.
- 5.3. Advice for fire-fighters
Use suitable breathing apparatus .
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- 6.1. Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment.
Remove all sources of ignition.
Remove persons to safety.
See protective measures under point 7 and 8.
- 6.2. Environmental precautions
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand.
- 6.3. Methods and material for containment and cleaning up
Pick up mechanically.
- 6.4. Reference to other sections
See also section 8 and 13.

SECTION 7. HANDLING AND STORAGE

- 7.1. Precautions for safe handling
Avoid contact with skin and eyes, inhalation of vapours and mists.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities
Keep in a dry, cool place.
Keep in a tightly-closed container in a well-ventilated place.



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Keep container dry
Keep away from heat and sources of ignition.
Protect from water
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
Keep away from food, drink and feed.
Incompatible materials:
Do not store with:
- Oxidizing agents;
- Acids;
- Alkalies;
- Nitrates;
- Alcohols;
- Halogenated hydrocarbons;
- Halogens
Instructions as regards storage premises:
Cool and adequately ventilated.

7.3. Specific end use(s)
None in particular.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

aluminium powder (stabilised) - CAS: 7429-90-5

OEL Type: Germany - LTE: 4 mg/m³ - Notes: Aluminium metal - inhalable aerosol - DE (DFG)

OEL Type: Germany - LTE: 1.5 mg/m³ - Notes: Aluminium metal - respirable aerosol - DE (DFG)

OEL Type: France - LTE: 10 mg/m³ - Notes: Aluminium metal - inhalable aerosol

OEL Type: France - LTE: 5 mg/m³ - Notes: Aluminium metal - respirable aerosol

OEL Type: Spain - LTE: 10 mg/m³ - Notes: Aluminium metal - inhalable aerosol

OEL Type: Spain - LTE: 5 mg/m³ - Notes: Aluminium metal - respirable aerosol

OEL Type: United Kingdom - LTE: 10 mg/m³ - Notes: Aluminium metal - inhalable aerosol

OEL Type: United Kingdom - LTE: 4 mg/m³ - Notes: Aluminium metal - respirable aerosol

1-methoxy-2-propanol; monopropylene glycol methyl ether - CAS: 107-98-2

OEL Type: F - LTE: 188 mg/m³, 50 ppm - STE: 375 mg/m³, 100 ppm - Notes: INRS

1-methoxy-2-propanol; monopropylene glycol methyl ether - CAS: 107-98-2

OEL 8h: 375 mg/m³ - 100 ppm

OEL short: 568 mg/m³ - 150 ppm

TLV TWA: 100 ppm - 368,59 mg/m³

TLV STEL: 150 ppm - 552,88 mg/m³

DNEL Exposure Limit Values

1-methoxy-2-propanol; monopropylene glycol methyl ether - CAS: 107-98-2

Worker Industry: 50.6 mg/kg - Exposure: Human Dermal Long Term, systemic effects

PNEC Exposure Limit Values

1-methoxy-2-propanol; monopropylene glycol methyl ether - CAS: 107-98-2

Worker Industry: 10 mg/l - Exposure: Environment: Water

Worker Industry: 100 mg/l - Exposure: Environment: Soil

8.2. Exposure controls



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Eye protection:
Eye glasses with side protection.

Protection for skin:
Overall.

Protection for hands:
Suitable gloves type:
EN 420 / EN 374

Respiratory protection:
Use adequate protective respiratory equipment, e.g. CEN/FFP-2 or CEN/FFP-3.

Thermal Hazards:
None.

Environmental exposure controls:
Not available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance and colour:	Pasty - Silver
Odour:	Solvent
Odour threshold:	N.A.
pH:	N.A.
Melting point / freezing point:	660°C (aluminium)
Initial boiling point and boiling range:	2467°C (aluminium)
Solid/gas flammability:	Highly flammable (UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria: Solids - Test N1 - Sub-section 33.2.1.4.)
Upper/lower flammability or explosive limits:	Inf 1.7% vol - Sup 13.1% vol (methoxypropanol)
Vapour density:	N.A.
Flash point:	30°C (methoxypropanol) °C
Evaporation rate:	N.A.
Vapour pressure:	13.3 hPa (methoxypropanol)
Relative density:	1.40-1.80 g/cm ³ (calculated)
Solubility in water:	Insoluble
Lipid solubility:	N.A.
Partition coefficient (n-octanol/water):	0.43 (methoxypropanol)
Auto-ignition temperature:	270-290°C (methoxypropanol)
Decomposition temperature:	N.A.
Viscosity:	1.0 mPa.s (dynamic) (methoxypropanol)
Explosive properties:	N.A.
Oxidizing properties:	N.A.

9.2. Other information

Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
Substance Groups relevant properties:	N.A.

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

It may generate flammable gases on contact with water, mineral acids, organic acids, caustic substances, isocyanates, mercaptans, and other organic sulphides.

It may generate toxic gases on contact with azo, diazo and hydrazines compounds.



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It may catch fire on contact with mineral acids, mercaptans and other organic sulphides, and powerful oxidising agents.

In case of contact with acid or alkaline (as well as water), aluminum powder will react and emission of hydrogen will occur.

10.4. Conditions to avoid

Avoid humidity.

10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

10.6. Hazardous decomposition products

Hydrogen.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information of the mixture:

N.A.

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information of the main substances found in the mixture:

1-methoxy-2-propanol; monopropylene glycol methyl ether - CAS: 107-98-2

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg

Test: LD50 - Route: Oral - Species: Rabbit 8000 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit 13500 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat 6 mg/l

High concentrations may cause narcotic effects (drowsiness or dizziness).

Prolonged contact may cause to skin dryness.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicological information of the mixture:

N.A.

Adopt good working practices, so that the product is not released into the environment.

Since no ecotoxicological data about the mixture is available, the concentration of each substance must be considered to assess the ecotoxicological effects resulting from exposure to the mixture.

Ecotoxicological information of the main substances found in the mixture:

1-methoxy-2-propanol; monopropylene glycol methyl ether - CAS: 107-98-2

Test: LC50 Fish - Duration h: 96 - mg/l: 1000

Test: EC50 Daphnia - Duration h: 48 - mg/l: 500

Oxidizes rapidly in air by photochemical reaction.

Completely soluble in water.

Move into the soil to the groundwater.

Readily biodegradable.

DCO reduction: 70%

Does not bioaccumulate.

Log P octanol / water (20 °C): 0.43

12.2. Persistence and degradability

None.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None.

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12.6. Other adverse effects
 None.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
 Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14. TRANSPORT INFORMATION



14.1. UN number
 ADR-UN Number: 1325
 IATA-UN Number: 1325
 IMDG-UN Number: 1325

14.2. UN proper shipping name
 ADR-Shipping Name: FLAMMABLE SOLID, ORGANIC, N.O.S. (1-methoxy-2-propanol)
 IATA-Shipping Name: FLAMMABLE SOLID, ORGANIC, N.O.S. (1-methoxy-2-propanol)
 IMDG-Shipping Name: FLAMMABLE SOLID, ORGANIC, N.O.S. (1-methoxy-2-propanol)

14.3. Transport hazard class(es)
 ADR-Class: 4.1
 ADR - Hazard identification number: 40
 IATA-Class: 4.1
 IMDG-Class: 4.1

14.4. Packing Group
 ADR-Packing Group: II
 IATA-Packing group: II
 IMDG-Packing group: II

14.5. Environmental hazards
 ADR-Environmental Pollutant: No
 IMDG-Marine pollutant: No

14.6. Special Precautions for User
 N.A.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
 No

SECTION 15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
 Dir. 98/24/EC (Risks related to chemical agents at work).
 Dir. 2000/39/EC (Occupational exposure limit values)
 Where applicable, refer to the following regulatory provisions:
 Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.
 Regulation (EC) nr 648/2004 (detergents).
 1999/13/EC (VOC directive).



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15.2. Chemical Safety Assessment
No

SECTION 16. OTHER INFORMATION

Full text of phrases referred to in Section 3:

R10 Flammable.

R11 Highly flammable.

R15 Contact with water liberates extremely flammable gases.

R67 Vapours may cause drowsiness and dizziness.

H261 In contact with water releases flammable gases.

H228 Flammable solid.

H226 Flammable liquid and vapour.

H336 May cause drowsiness or dizziness.

Paragraphs modified from the previous revision:

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

16. OTHER INFORMATION

MSDS Code Alp EMR = ALPATE EMR-B-125, EMR-B6370, EMR-B7630, EMR-D1227, EMR-D-125 - EMR-D-161, EMR-D3040, EMR-D-5422, EMR-D5660, EMR-D-762E, EMR-D767E, EMR-DM12A, EMR-D6390, EMR-D761E, EMR-DMS650, EMRD5660H

This safety data sheet has been completely updated in compliance with Regulation 453/2010/EU.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

EAPA (European Aluminium Particulate Association)

ECHA CHEM (European Chemicals Agency)

TOXNET (Hazardous Substances Data Bank)

GESTIS International Limit Values (IFA)

ESIS (European chemical Substances Information System) - European Commission/Joint Research Centre/Institute for Health and Consumer Protection

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This document supersedes any previous version.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
EC50:	Median effective concentration.
IATA:	International Air Transport Association.
IMDG:	International Maritime Code for Dangerous Goods.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.



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N.A.: Not available
OEL: Occupational exposure limit.
PBT: Persistent, Bioaccumulative and Toxic.
RID: Regulation Concerning the International Transport of Dangerous Goods
by Rail.
STE: Short-term exposure.
vPvB: very Persistent and very Bioaccumulative.

End of the safety data sheet.