Safety Data Sheet

Silica coated aluminium paste with Methoxypropanol solvent

According to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No. 2020/878)

Version: 5
Version date: 26/01/2021
Language: EN

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

1.1. Product identifier

Trade name/designation	:	Silica coated aluminium paste with Methoxypropanol solvent
Article No (user)	:	Alp EMR/PM

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

Relevant identified uses	:	Coatings, Inks, Packaging, Plastics.
Uses advised against	:	No use against-indicated identified.

1.3. Details of the supplier of the safety data sheet

Supplier :

Name: TOYAL EUROPE.
Street: Route de Lescun.
Postal code/City: 64490ACCOUS.
Telephone: +33 (0)5 59 98 35 35
Telefax: +33 (0)5 59 98 35 36
E-mail: Reach@toyal-europe.com

1.4. Emergency Telephone Number

Ireland: +35 (0) 31 837 9964 (medical professionals) +35 (0) 31 809 2166 (public)
Malta: +356 2545 4030
United Kingdom: In England and Wales: dial 111 (NHS 111), In Scotland: dial 111 (NHS 24), In Northern Ireland: Contact your local GP or pharmacist during normal hours. During GP Out-of-Hours (www.gpoutofhours.hscni.net/): Belfast HSC Trust, (North & West) 028 9074 4447, (South & East) 028 9079 6220
South Eastern HSC Trust, (North Down & Ards) 028 9182 2344, (Lisburn & Downpatrick) 028 9260 2204, Dalriada Urgent Care (Northern Trust area) 028 2566 3500, Southern HSC Trust 028 3839 9201, Western Urgent Care 028 7186 5195
For all information in case of transport accident and other emergencies: Emergency Contact (24h/24) GBK/Infotrac ID 103679 : international (001) 352 323 3500

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

Classification	Hazard statements (H)	
Flam. Sol. 1	H228	Flammable solid.
STOT SE 3	H336	May cause drowsiness or dizziness

2.2. Label elements

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

Hazard pictograms	
Signal word	Danger
Product identifiers	-
Hazard Statements	H228 - Flammable solid. H336 - May cause drowsiness or dizziness
Supplemental Hazard information (EU)	-
Precautionary Statements - General	-
Precautionary Statements - Prevention	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P241 - Use explosion-proof electrical/ventilating/lighting/.../equipment. P271 - Use only outdoors or in a well-ventilated area.
Precautionary Statements - Response	P312 - Call a POISON CENTER/doctor/.../if you feel unwell. P370+P378 - In case of fire: Use powder to extinguish.
Precautionary Statements - Storage	-
Precautionary Statements - Disposal	P501 - Dispose of contents/container in accordance with applicable local/regional/national/international regulations

2.3. Other hazards

Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Substance	C (%)	Classification	Specific concentration limits	Note
aluminium powder (stabilised) CAS N°: 7429-90-5 EC N°: 231-072-3 IDX N°: 013-002-00-1 N° REACH : 01-2119529243-45-0203	35.0% ≤C≤ 75.0%	H228: Flammable solid. H261: In contact with water releases flammable gases.	-	-
1-methoxypropan-2-ol CAS N°: 107-98-2 EC N°: 203-539-1 IDX N°: 603-064-00-3 N° REACH: 01-2119457435-35-XXXX	20.0% ≤C≤ 60.0%	H226: Flammable liquid and vapour. H336: May cause drowsiness or dizziness	-	[1]
silicon dioxide CAS N°: 7631-86-9 EC N°: 231-545-4 IDX N°:	2.0% ≤C≤ 20.0%	-	-	[1]

[1] Substance for which maximum workplace exposure limits are available.

3.2. Mixtures

Not available

3.3. Remark

Text phrases and H- EUH-: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	:	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Remove the affected person from the danger zone and lay down.
Following inhalation	:	Remove person to fresh air and keep comfortable for breathing. Remove casualty to fresh air and keep warm and at rest. No resuscitation mouth-to-mouth or mouth-to-nose. Ambu use a mask or respirator.
Following skin contact	:	Wash with soap and water. In case of skin irritation, consult a physician. Remove contaminated, saturated clothing immediately.
Following eye contact	:	In case of eye irritation consult an ophthalmologist. Rinse immediately carefully and thoroughly with eye-bath or water.
Following ingestion	:	Seek medical advice immediately. Do NOT induce vomiting.
Self-protection of the first aider	:	First aider: Pay attention to self-protection!.

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

Symptoms	:	No information available.
Effects	:	No information available.

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

Notes for the doctor	:	Treat symptomatically.
Special treatment	:	Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	Carbon dioxide (CO2). Dry powder extinguishing for metal (D). Dry sand. ABC-powder.
Unsuitable extinguishing media	:	Water. Mousse anti-alcool, Halocarbures.

5.2. Special hazards arising from the substance or mixture

- Formation of toxic gases is possible during heating or in case of fire. In case of contact with an acid or a base (or with water), aluminum powders react and potentially create hydrogen. Do not inhale vapors and fumes.

5.3. Advice for firefighters

- Wear a self-contained breathing apparatus and chemical protective clothing. Move undamaged containers from immediate hazard area if it can be done safely.

5.4. Additional information

- Do not inhale vapors and fumes. Co-ordinate fire-fighting measures to the fire surroundings. Move undamaged containers from immediate hazard area if it can be done safely. Use caution when applying carbon dioxide in confined spaces. carbon dioxide can displace oxygen. Use water spray jet to protect personnel and to cool endangered containers. 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

- Use personal protection equipment. Remove persons to safety. Provide adequate ventilation. Use appropriate respiratory protection. Remove all sources of ignition. Evacuate area.

6.2. Environmental precautions

- Ensure that waste is collected and contained. Avoid release to the environment. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities. Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

- Treat the recovered material as prescribed in the section on waste disposal. Collect in closed and suitable containers for disposal. Clean contaminated objects and areas thoroughly observing environmental regulations. Ventilate affected area. Clean mechanically. Use an absorbent material such as: absorbing material, organic material, sand. Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

- Safe handling: see section 7. Disposal: see section 13. Personal protection equipment: see section 8.

6.5. Additional information

- Not available.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

- Avoid exposure - obtain special instructions before use. Avoid contact with skin, eyes and clothes. Do not breathe dust/fume/gas/mist/vapours/spray. Take off contaminated clothing. When using do not eat or drink. Keep away from heat, hot surfaces, sparks, open flames and all other ignition sources. Do not smoke. Protect from direct sunlight. Use only outdoors or in a well-ventilated area. Use explosion-proof electrical/ventilating/lighting/.../equipment.

PROTECTIVE MEASURES

- Avoid contact with skin, eyes and clothes. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Provide earthing of containers, equipment, pumps and ventilation facilities. Use only in well-ventilated areas. Provide adequate ventilation as well as local exhaustion at critical locations. If local exhaust ventilation is not possible or not enough, the entire work area must be ventilated by technical means. Dust should be exhausted directly at the point of origin. Avoid breathing dust.

Advices on general occupational hygiene

- Wash hands before breaks and after work. Do no eat, drink or smoke when using this product. Remove contaminated, saturated clothing immediately. Work in well ventilated zones or use proper respiratory protection.

7.2. Conditions for safe storage, including any incompatibilities

- Ensure adequate ventilation of the storage area. Keep in a cool, well-ventilated place. Storage recommendation to the maximum temperature of 35 °C.
- Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/.../equipment. Store in a well-ventilated place. Keep away from heat. Store protected from moisture. Prevent contact with water. Do not store with oxidizing agents, acids and bases, nitrates, alcohols, halogenated hydrocarbons and halogens. Keep in a cool, well-ventilated place. Keep container tightly closed and in a well ventilated place.

Advice on joint storage

- Keep away from food, drink and animal feeding stuffs.

7.3. Specific end uses

- No particular use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits

Substance	Value	Unit	Type
silicon dioxide CAS: 7631-86-9 (IE)	6	mg/m³	Exposure limit (8 hours)
silicon dioxide CAS: 7631-86-9 (GB)	6	mg/m³	Exposure limit (8 hours)
1-Methoxy-2-propanol CAS: 107-98-2 (GB)	560	mg/m³	Exposure limit (15 minutes)
1-Methoxy-2-propanol CAS: 107-98-2 (GB)	150	ppm	Exposure limit (15 minutes)
1-Methoxy-2-propanol CAS: 107-98-2 (GB)	375	mg/m³	Exposure limit (8 hours)
1-Methoxy-2-propanol CAS: 107-98-2 (GB)	100	ppm	Exposure limit (8 hours)
aluminium powder (stabilised) CAS: 7429-90-5 (GB)	4	mg/m³	Exposure limit (8 hours)
aluminium powder (stabilised) CAS: 7429-90-5 (GB)	10	mg/m³	Exposure limit (8 hours)
1-Methoxy-2-propanol CAS: 107-98-2 (GB)	560	mg/m³	Exposure limit (15 minutes)
1-Methoxy-2-propanol CAS: 107-98-2 (GB)	150	ppm	Exposure limit (15 minutes)
1-Methoxy-2-propanol CAS: 107-98-2 (GB)	375	mg/m³	Exposure limit (8 hours)
1-Methoxy-2-propanol CAS: 107-98-2 (GB)	100	ppm	Exposure limit (8 hours)

8.2. Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. Provide adequate ventilation as well as local exhaustion at critical locations. Local ventilation may be necessary to prevent airborne contaminants exceed their exposure limits.

Personal protection equipment

Eye/face protection : Suitable eye protection: Use only outdoors or in a well-ventilated area. Eye glasses with side protection.

Skin protection : **Hand protection:**

- Suitable gloves type: Wear waterproof gloves and chemical resistant.
- Protective gloves in accordance with EN420 or EN374 minimum. Gloves must be changed after every contamination or degradation.
- Hand protection: Suitable material: Cotton, Leather.
- Hand protection: Additional hand protection measures.: Do not wear gloves near machines and rotating tools. Use gloves only once.
- Hand protection: Remark: When handling with chemical substances, protective gloves must be worn with the CE-label including 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. Breakthrough times and swelling properties of the material must be taken into consideration.
- Hand protection: Wear protective gloves.

Body protection**:** Wear protective clothing.

Respiratory protection : **Respiratory protection necessary at:**

- Wear respiratory protection.
- If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Suitable masks should be worn. Suitable masks should be worn if exposed to concentrations exceeding the permissible exposure limits. Respiratory protection in accordance with EN149 minimum.

Suitable respiratory protection apparatus: Respiratory filter: FP2/FFP3 (EN149: 2001)
Remark**:** The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. Use only respiratory protection equipment with CE-symbol including four digit test number. Observe the wear time limits as specified by the manufacturer.

Environmental exposure controls

Avoid release to the environment.

8.3. Additional information

Not available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state:	Solid
Colour:	Silver Grey
Odour:	Solvent
Odour threshold:	Not Available
pH:	Not available
Melting point/freezing point:	660 ° C (aluminum)
Initial boiling point and boiling range:	Not available
Flash point:	Not available
Evaporation rate:	Not Applicable
Flammability:	The Product Is Highly Flammable Test After Test N1 - Sub-section 33.2.1.4. (un Recommendations On The Transport Of Dangeroux Good, Manual Of Tests And Criteria: Solids)
Upper/lower flammability or explosive limits:	Not Available
Vapour pressure:	13.3 Hpa (methoxypropanol)
Vapour density:	Not Applicable
Relative density:	1.40-1.80 G/cm 3 (calculated)
Solubility(ies):	Insoluble.

Partition coefficient: n-octanol/water (Log KOC):	Not Available
Auto-ignition temperature:	270-290 ° C (methoxypropanol)
Decomposition temperature:	Not Applicable
Viscosity:	1.0 Mpa.s (dynamic) (methoxypropanol)
Explosive properties:	Not Applicable
Oxidising properties:	Not available

9.2. Other safety information

Physical state: Solid pasty.
Initial boiling point and boiling range: 2467 ° C (aluminum) °C.
Flash point: 30 ° C (methoxypropanol) °C.
Not available.

SECTION 10: Stability and Reactivity

10.1. Reactivity

No reaction under normal conditions of use and storage.

10.2. Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

It may generate flammable gases in contact with water, mineral acids, organic acids, caustic substances, isocyanates, mercaptans and other organic sulphides. It may generate toxic gases in contact with azoic combinations, diazo and hydrazines. May ignite on contact with mineral acids, mercaptans and other organic sulphides, and powerful oxidising agents.

10.4. Conditions to avoid

Keep away from moisture.

10.5. Incompatible materials

Avoid contact with oxidizing substances: the product could catch fire.

10.6. Hazardous decomposition products

In case of contact with an acid or a base (or with water), aluminum powders react and potentially create hydrogen.

10.7. Additional information

Not available.

SECTION 11: Toxicological information

11.1. Acute oral toxicity

Data for mixture
Not available
Substances
1-methoxypropan-2-ol (CAS: 107-98-2)

Species	:	Rat
Sex	:	Not available
Guideline	:	Not available

Subendpoint	Operator	Value	Unit
LD50:	>	5000	mg/kg bw

Conclusion : Not available

11.2. Acute skin toxicity

Data for mixture

Not available

Substances

1-methoxypropan-2-ol (CAS: 107-98-2)

Species : Rabbit
Sex : Not available
Guideline : Not available
Exposure duration/value : Not available
Exposure duration/unit : Not available

Subendpoint	Operator	Value	Unit
LD50:	=	135000	mg/kg bw

Conclusion : Not available

11.3. Acute inhalation toxicity

Data for mixture

Not available

Substances

1-methoxypropan-2-ol (CAS: 107-98-2)

Species : Rat
Sex : Not available
Guideline : Not available
Route of administration : Not available
Exposure duration/value : Not available
Exposure duration/unit : Not available

Subendpoint	Results/Sex	Operator	Value	Unit
LC50:	-	=	6	mg/L

Conclusion : Not available

11.4. Skin corrosion

Data for mixture

Not available

Substances

Not available

11.5. Eye damage

Data for mixture

Not available

Substances

Not available

11.6. Skin sensitisation

Data for mixture

Not available

Substances

Not available

11.7. STOT SE

Data for mixture

Not available

Substances

Not available

11.8. STOT RE

Data for mixture

Not available

Substances

Not available

11.9. Carcinogenicity

Data for mixture

Not available

Substances

1-methoxypropan-2-ol (CAS: 107-98-2)

Test type	:	Not available
Species	:	Not available
Sex	:	Not available
Guideline	:	Not available
Route of administration	:	Not available
Exposure duration/value	:	Not available
Exposure duration/unit	:	Not available

Subendpoint	Results/Sex	Operator	Value	Unit
-	-	-	-	-

Conclusion : Not identified as a carcinogen.

11.10. Reproductive and Developmental Toxicity

Data for mixture

Not available

Substances

1-methoxypropan-2-ol (CAS: 107-98-2)

Test type	:	Not available
Species	:	Not available
Sex	:	Not available
Guideline	:	Not available
Route of administration	:	Not available
Exposure duration/value	:	Not available
Exposure duration/unit	:	Not available
Concentration	:	Not available

Subendpoint	Results/Sex	Operator	Value	Unit
-	-	-	-	-

Conclusion : Not identified as toxic to reproduction.

11.11. In vitro genotoxicity

Data for mixture

Not available

Substances

Not available

11.12. Respiratory sensitisation

Data for mixture

Not available

Substances

Not available

11.13. Additional information

Not available

Serious eye damage/irritation

Not available

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Use the product is not released into the wild.

Acute aquatic toxicity

Substances

1-methoxypropan-2-ol (CAS: 107-98-2)

Animals/category	:	Fish
Species	:	Not available
Test duration	:	96
Unit	:	h
Guideline	:	Not available

Subendpoint	Value	Unit
LC50:	1000	mg/L

Remarks : Not available

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

Animals/category	:	Fish
Species	:	Not available
Test duration	:	96
Unit	:	h
Guideline	:	Not available

Subendpoint	Value	Unit
LC50:	2.6	mg/L

Remarks : Not available

12.2. Persistence and degradability

Not available

12.3. Bioaccumulative potential

Not available

Bioconcentration factor (BCF)

Substances

1-methoxypropan-2-ol (CAS: 107-98-2)

Species	:	Not available
Guideline	:	Not available
Log kow	:	Not available

Bioconcentration factor (BCF)
-

Remarks : Do not bioaccumulate. Log P octanol/water (20 ° C): 0.43.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6. Other adverse effects

No data available.

12.7. Additional ecotoxicological information

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

- No data

Properties of waste which render it hazardous

- Flammable Solid. Harmful.

Waste treatment options

- Appropriate disposal/Product: Waste requiring special supervision. Dispose of waste according to applicable legislation. Delivery to an approved waste disposal company.
- Appropriate disposal/Package: Non-contaminated packages must be recycled or disposed of. Contaminated packing must be completely emptied and can be reused after proper cleaning. Packing which cannot be properly cleaned must be disposed of. Handle contaminated packages in the same way as the substance itself. Dispose of waste according to applicable legislation.
- Send to a hazardous waste incinerator or to a processing unit for physico-chemical agents under the control of the official regulatory bodies. Dispose in accordance with local and national regulations. The allocation of waste identification numbers and their descriptions must be in compliance with the EEC.

SECTION 14: TRANSPORT INFORMATION

	Land transport (ADR/RID)	Inland waterway transport (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI/IATA-DGR)
14.1. UN number	1325	1325	1325	1325
14.2. UN proper shipping name	SOLIDE ORGANIQUE INFLAMMABLE, N.S.A.	SOLIDE ORGANIQUE INFLAMMABLE, N.S.A.	SOLIDE ORGANIQUE INFLAMMABLE, N.S.A.	SOLIDE ORGANIQUE INFLAMMABLE, N.S.A.
14.3. Transport hazard class(es)				
Class or Division	4.1	4.1	4.1	4.1
Hazard label(s)				
14.4. Packing group	II	II	II	II

14.5. Environmental hazards

Not available

14.6. Special precautions for user

Not available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not available

14.8. Additional information

Not available

SECTION 15: REGULATORY INFORMATION

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

Regulations: EN Tables of occupational diseases.
Not available

15.2. Chemical Safety Assessment

No risk assessment was performed.

15.3. Additional information

Not available.

SECTION 16: OTHER INFORMATION

Creation date:	26/01/2021
Version date:	26/01/2021
Printing date:	20/10/2021

16.1. Indication of changes

Modification of Section 1.1.

16.2. Abbreviations and acronyms

ADN/ADNR: Regulations concerning the transport of dangerous substances in barges on the waterways.
DOT:Hazardous Materials Transportation Act and Regulations.
CAS: Chemical Abstract Service Number.
CLP: Classification, labeling and packaging.
IATA: International Air Transport Association.
IMDG: International Maritime Dangerous Goods Code.
DPD Dangerous Preparation Directive.
UN number: United Nations number.
No EC: European Commission Number.
VPvB: very persistent and very bioaccumulative substances.
LC50: Lethal concentration for 50 percent of the population tested.
LD50: Lethal dose for 50 percent of the population tested.
NA: Not available.
PBT: persistent, bioaccumulative, toxic substances.

16.3. Key literature references and sources for data

Not available.

16.4. Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

Classification of the mixture is in accordance with the evaluation method described in Regulation (EC) No 1272/2008.

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

H226	Flam. Liq. 3	Flammable liquid and vapour.
H228	Flam. Sol. 1	Flammable solid.
H261	Water-react. 2	In contact with water releases flammable gases.
H336	STOT SE 3 H336	May cause drowsiness or dizziness

16.6. Training advice

Not available

16.7. Additional information

Not available

The information given in this Safety Data Sheet is based on our present knowledge and on european and national regulations.This Safety Data Sheet describes safety requirements relative to identified uses, it doesn't guarantee all the product properties particularly in the case of non identified uses.The product mustn't be used for any uses other than those identified under heading 1.Since the user's working conditions are not known by us, it is the responsability of the user to take all necessary measures to comply with legal requirements for specific uses and avoid negative health effects.