

# Aluminium atomized Powder

## Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No. 2015/830)



Version: 4

Version date: 01/09/2019

Language: EN

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

#### 1.1. Product identifier

Product description : Aluminium atomized powder  
MSDS code : Alpowder  
N°REACH : 01-2119529243-45-0203

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

Relevant identified uses : Powder metallurgy, solid propulsion, Adhesives, Refractories, alloys, coatings, aluminothermy, Catalysis.  
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: 64490. ACCOUS.  
Telephone: +33 (0)5 59 98 35 35.  
Telefax: +33 (0)5 59 98 35 36.  
E-mail (competent person): 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/](http://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]

This mixture is not classified as dangerous.

#### 2.2. Label elements

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

Hazard pictograms -  
Signal word -  
Product identifiers -  
Hazard Statements -  
Additional information -  
Precautionary Statements - General -  
Precautionary Statements - Prevention -  
Precautionary Statements - Response -  
Precautionary Statements - Storage -  
Precautionary Statements - Disposal -

#### 2.3. Other hazards

Not available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

This product does not contain any hazardous ingredients at or above regulated thresholds.

### 3.2. Mixtures

Not available

### 3.3. Remark

Not available

## 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).
Following inhalation	:	In case of accident by inhalation: remove casualty to fresh air and keep at rest. Get medical advice/attention if you feel unwell.
Following skin contact	:	After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.
Following eye contact	:	In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.
Following ingestion	:	Rinse mouth thoroughly with water. Give nothing to eat or drink. Get medical advice/attention if you feel unwell.
Self-protection of the first aider	:	No information available.

### 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

Special treatment	:	Treat symptomatically.
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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	:	Dry sand. Carbon dioxide (CO <sub>2</sub> ). Extinguishing dry powder (ABC or BC). Dry powder extinguishing for metal (D).
Unsuitable extinguishing media	:	Water. Alcohol foam. Halocarbons.

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

In case of contact with an acid or a base (or with water), aluminum powders react and potentially create hydrogen. Do not disperse dust and put it into suspension - due to the risk of the dust exploding.

### 5.3. Advice for firefighters

Use suitable breathing apparatus.

Special protective equipment for firefighters

In case of fire: Wear suitable breathing apparatus and protective clothing.

### 5.4. Additional information

Not available

## SECTION 6: Accidental release measures

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

Evacuate area. Remove persons to safety. Eliminate all ignition sources if safe to do so. Use personal protection equipment. Avoid generation of dust.

### 6.2. Environmental precautions

Avoid release to the environment. 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

Do not vacuum residues with a non-explosion proof vacuum cleaner - there is a risk of the dust exploding. Clean contaminated objects and areas thoroughly observing environmental regulations.

### 6.4. Reference to other sections

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

### 6.5. Additional information

Not available

## SECTION 7: Handling and Storage

### 7.1. Precautions for safe handling

Provide adequate ventilation. Use explosion-proof electrical/ventilating/lighting/.../equipment. Use only non-sparking tools. Use personal protection equipment. Avoid contact with skin, eyes and clothes. Avoid generation of dust. Take precautionary measures against static discharges. Advices on general occupational hygiene  
Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

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

Technical measures and storage conditions  
Keep away from heat. Keep away from incompatible materials. Keep container tightly closed and in a well-ventilated place.

### 7.3. Specific end uses

No information available.

## SECTION 8: Exposure controls / personal protection

### 8.1. Control parameters

#### Occupational exposure limits

Substance	Value	Unit	Type
aluminium powder (stabilised) CAS: 7429-90-5 (GB)	4	mg/m <sup>3</sup>	Exposure limit (8 hours)
aluminium powder (stabilised) CAS: 7429-90-5 (GB)	10	mg/m <sup>3</sup>	Exposure limit (8 hours)
aluminium powder (stabilised) CAS: 7429-90-5 (IE)	1	mg/m <sup>3</sup>	Exposure limit (8 hours)

### 8.2. Exposure controls

#### Appropriate engineering controls

Local ventilation may be necessary to prevent airborne contaminants exceed their exposure limits.

#### Personal protection equipment

- Eye/face protection : Suitable eye protection: Safety glasses (EN166).  
Skin protection : Hand protection: Suitable gloves type: No information / Wear waterproof gloves and chemical resistant (standard EN374). The glove material must be selected depending on the breakthrough time and the permeation rate.  
Respiratory protection : Respiratory protection necessary at: Respiratory protection in accordance with EN149 minimum. Suitable masks should be worn if exposed to concentrations exceeding the permissible exposure limits.  
Suitable respiratory protection apparatus: Respiratory filter: FP2 / FFP3 (EN149: 2001).

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

<b>Physical state:</b>	powder
<b>Colour:</b>	Silver Grey
<b>Odour:</b>	Odorless
<b>Odour threshold:</b>	Not available
<b>PH:</b>	Not available
<b>Melting point/freezing point:</b>	660 °C
<b>Initial boiling point and boiling range:</b>	2450 °C
<b>Flash point:</b>	°C
<b>Evaporation rate:</b>	Not available
<b>Flammability:</b>	Not available
<b>Upper/lower flammability or explosive limits:</b>	Not available
<b>Vapour pressure:</b>	Not available
<b>Vapour density:</b>	Not available
<b>Relative density:</b>	Not available
<b>Solubility(ies):</b>	Not available
<b>Partition coefficient: n-octanol/water (Log KOC):</b>	Not available

**Auto-ignition temperature:** Not available  
**Decomposition temperature:** Not available  
**Viscosity:** Not available  
**Explosive properties:** Not available  
**Oxidising properties:** Not available

## 9.2. Other safety information

Not available

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

Possible exothermic reaction on contact with incompatible materials.

### 10.2. Chemical stability

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

### 10.3. Possibility of hazardous reactions

Under normal conditions of usage and storage, hazardous reactions will not occur.

### 10.4. Conditions to avoid

Keep away from heat. Keep away from sources of ignition - No smoking. Keep away from moisture.

### 10.5. Incompatible materials

Materials to avoid

Explosive reaction with: With potentially exothermic decomposition of hydrogen.  
Oxidants. Water. Halogenated hydrocarbons. Alcohols. Acids and Bases. Nitrates.

### 10.6. Hazardous decomposition products

Not available

### 10.7. Additional information

Not available

## SECTION 11: Toxicological information

### 11.1. Acute oral toxicity

Data for mixture

Not available

Substances

Not available

### 11.2. Acute skin toxicity

Data for mixture

Not available

Substances

Not available

### 11.3. Acute inhalation toxicity

Data for mixture

Species : Rat

Sex : OECD Guideline 403 (Acute Inhalation Toxicity)

subendpoint	Results / Sex	Operator	Value	Units
LC50:	-	>	888	mg/m3

Substances

Not available

### 11.4. Skin corrosion

Data for mixture

Not available

Substances

Not available

### 11.5. Eye damage

Data for mixture

test Type : OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Conclusion : non-irritating to the skin

## Substances

Not available

### 11.6.Skin sensitisation

#### Data for mixture

Not available

## Substances

Not available

### 11.7.STOT RE

#### Data for mixture

Not available

## Substances

Not available

### 11.8.STOT SE

#### Data for mixture

Not available

## Substances

Not available

### 11.9.Carcinogenicity

#### Data for mixture

Not available

## Substances

Not available

### 11.10.Reproductive and Developmental Toxicity

#### Data for mixture

Not available

## Substances

Not available

### 11.11.genotoxicity

#### Data for mixture

Not available

## Substances

Not available

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Acute aquatic toxicity

## Substances

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

Animals / category : Fish  
Species : 96  
test Duration : h

subendpoint	Value	Units
LC50:	2.6	-

### 12.2. Persistence and degradability

### 12.3. Bioaccumulative potential

### 12.4. Mobility in soil

### 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

Not available

### 12.7. Additional ecotoxicological information

Not available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Disposal in accordance with local and national regulations. Waste Code List or proposed waste marking according to the EEC.

Product/Packaging disposal

Waste codes / waste designations according to EWC / AVV: No information.

### 13.2. Additional information

Not available

## SECTION 14: Transport information

The product is not subject to ADR / ADN / RID / IMDG / ICAO.

## SECTION 15: Regulatory information

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

Not available.

Not available

### 15.2. Chemical Safety Assessment

In view of the data on the harmlessness of the substance, no risk assessment has been conducted.

### 15.3. Additional information

Not available

## SECTION 16: Other information

### 16.1. Indication of changes

1.1. Product identifier

### 16.2. Abbreviations and acronyms

ADN / ADNOR: Regulations concerning the transport of dangerous substances in barges on the waterways. VPvB: very persistent and very bioaccumulative substances. UN number: United Nations number. IMDG: International Maritime Dangerous Goods Code. No EC: European Commission Number. DPD Dangerous Preparation Directive. CLP: Classification, labeling and packaging. CAS: Chemical Abstract Service Number. ADR / RID: European Agreement concerning the International Carriage of Dangerous Goods by Road / Regulations concerning the international carriage of dangerous goods by rail. VOC: Volatile Organic Compounds. RoHS: Restriction of Hazardous Substances directive. PPE: Personal Protective Equipment. IATA: International Air Transport Association. PBT: persistent, bioaccumulative, toxic substances. UVCB: Substance of unknown or variable composition, complex reaction products or biological materials.

### 16.3. Key literature references and sources for data

No information 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)

Not available

### 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 responsibility of the user to take all necessary measures to comply with legal requirements for specific uses and avoid negative health effects.