

# Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



## 54800 Aluminum Powder, fine

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Revised edition: 12.02.2023

Version: 4.0

Printed: 05.03.2024

### 1. Identification of the Substance/Mixture and of the Company/Undertaking

#### 1.1. Product Identifier

*Product Name:* Aluminum Powder, fine

*Article No.:* 54800

*UFI:* JOX3-JOGM-3002-18EH

#### 1.2. Relevant identified Uses of the Substance or Mixture and Uses advised against

*Identified uses:*  
Coloring agent, pigment

*Uses advised against:*

#### 1.3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

*Company:* Kremer Pigmente GmbH & Co. KG

*Address:* Hauptstr. 41-47, 88317 Aichstetten, Germany

*Tel./Fax.:* Tel +49 7565 914480, Fax +49 7565 1606

*Internet:* www.kremer-pigmente.com

*E-Mail:* info@kremer-pigmente.com

*Importer:* --

#### 1.4. Emergency No.

*Emergency No.:* +49 7565 914480 (Mon-Fri 8:00 - 17:00)

#### 1.4.2 Poison Center:

### 2. Hazards Identification

#### 2.1. Classification of the Substance or Mixture

*Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)*

Flammable solids, hazard category 1

H228 Flammable solid.

Cat.: 1

*Possible Environmental Effects:*

#### 2.2. Label Elements

*Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)*

*Hazard designation:*



GHS02-2

*Signal word:*

Danger

*Hazard designation:*

H228 Flammable solid.

*Safety designation:*

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P210	Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P280	Wear protective gloves/ clothing/ eye/ face protection.
P370+P378	In case of fire: use water spray, foam, carbon dioxide or dry extinguishing powder for extinction.

*Hazardous components for labelling:*

### 2.3. Other Hazards

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## 3. Composition/Information on Ingredients

### 3.1. Substance

### 3.2. Mixture

*Chemical Characterization:* Aluminum powder

*Information on Components / Hazardous Ingredients:*

Aluminium powder (H261-228); REACH Reg. No. 50 - 100 %  
01-2119529243-45

CAS-Nr: 7429-90-5  
EINECS-Nr: 231-072-3  
EC-Nr: 013-002-00-1

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*Additional information:*

## 4. First Aid Measures

### 4.1. Description of the First Aid Measures

*General information:*

*Take person away from hazardous area.*

*After inhalation:*

*Supply fresh air. Consult physician if symptoms persist.  
In case of unconsciousness place patient stable in side position for transportation.*

*After skin contact:*

*Wash off immediately with soap and plenty of water and rinse thoroughly.  
Remove contaminated clothing.*

*After eye contact:*

*Remove contact lens.  
Rinse open eye for several minutes under running water.*

*After ingestion:*

*Do not give milk or alcoholic beverages to drink.  
Never give anything by mouth to an unconscious person.  
If symptoms persist consult physician.*

### 4.2. Most important Symptoms and Effects, both Acute and Delayed

*Symptoms:*

*No further information available.*

*Effects:*

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### 4.3. Indication of any Immediate Medical Attention and special Treatment needed

*Treatment:*

*No further information available.*

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## 5. Fire-Fighting Measures

### 5.1. Extinguishing Media

*Suitable extinguishing media:*

*Not applicable.*

*Unsuitable extinguishing media:*

### 5.2. Special Hazards arising from the Substance or Mixture

*Special hazards:*

*No information available.*

### 5.3. Advice for Firefighters

*Protective equipment:*

*Wear self-contained respiratory protective device.*

*Usual measures for chemical fires.*

*Further information:*

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## 6. Accidental Release Measures

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

*Personal precautions:*

*Avoid formation of dust.*

*Keep away from sources of ignition. No smoking.*

### 6.2. Environmental Precautions

*Environmental precautions:*

*Prevent contamination of soil, drains and surface waters.*

### 6.3. Methods and Material for Containment and Cleaning Up

*Methods and material:*

*Do not use water or other watery cleaning fluids.*

*Clean up mechanically. Avoid dust formation.*

### 6.4. Reference to other Sections

*Protective clothing, see Section 8.*

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## 7. Handling and Storage

### 7.1. Precautions for Safe Handling

*Instructions on safe handling:*

*Avoid formation of dust. Do not inhale dust.*

*Hygienic measures:*

*Do not eat or drink during work. Do not smoke.*

*Wash hands with soap and water.*

### 7.2. Conditions for Safe Storage, including any Incompatibilities

*Storage conditions:*

*Store in tightly sealed containers in a dry and well ventilated*

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location.

Electric equipment have to comply with the technological safety standards.

Requirements for storage areas and containers:

Keep container tightly closed.

Information on fire and explosion protection:

Keep away from sources of ignition - do not smoke. Take measures to prevent electrostatic discharge.

Dust may form an explosive mixture with air.

Ensure electrical continuity by bonding and grounding (earthing) all equipment.

Ground and bond containers when transferring material.

Storage class:

4.1 B; flammable solids (TRGS 510)

Further Information:

Store in a dry place.

### 7.3. Specific End Use(s)

Further information:

## 8. Exposure Controls/Personal Protection

### 8.1. Parameters to be Controlled

Parameters to be controlled (DE):

Aluminium powder (CAS 7429-90-5): TLV (TRGS 900; D) 10 mg/m<sup>3</sup> (inhalable fraction); 1.25 mg/m<sup>3</sup> (airborne fraction)

Parameters to be controlled:

Derived No-Effect Level (DNEL):

Aluminium powder (7429-90-5):

3.72 mg/m<sup>3</sup> (worker, inhalation, long-term exposition - systemic and local effects)

3.95 mg/kg bw/d (consumer, swallowing, long-term exposition - systemic effects)

Predicted No-Effect Concentration (PNEC):

Aluminium powder (7429-90-5):

Fresh water: 0.0749 mg/l

Sewage treatment system (STP): 20 mg/l

Additional Information:

Biological limit value:

Biological limit value: Aluminium: 50 µg/g creatinine (end of exposure or shift; urine)

### 8.2. Exposure Controls

Technical protective measures:

No further measures, see Section 7.

Personal Protection

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### General protective measures:

*Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work.*

### Respiratory protection:

*Dust mask recommended when very dusty (with particle filter P1).*

### Hand protection:

*Protective gloves made of leather.  
Protective gloves with long gauntlets.*

### Protective glove material:

*Leather gloves (< 60 min)  
Please note the manufacturers' detailed statements, especially about the minimum thickness and the minimum breakthrough time.*

### Eye protection:

*Safety glasses with protective shields (EN 166).*

### Body protection:

*Electrostatically conductive and flame retardant protective clothing (DIN EN 11612; EN 533; EN 1149-1), and electrostatically conductive safety shoes.*

### Environmental precautions:

*Prevent from getting into the soil, surface water and sewage system.*

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## 9. Physical and Chemical Properties

### 9.1. Information on Basic Physical and Chemical Properties

<i>Form:</i>	<i>powder</i>
<i>Color:</i>	<i>silver</i>
<i>Odor:</i>	<i>odorless</i>
<i>Odor threshold:</i>	<i>no information available</i>
<i>pH-Value:</i>	<i>not applicable</i>
<i>Melting temperature:</i>	<i>not available</i>
<i>Boiling temperature:</i>	<i>not available</i>
<i>Flash point:</i>	<i>not available</i>
<i>Evaporation rate:</i>	<i>No information available.</i>
<i>Flammability (solid, gas):</i>	<i>Flammable solid, category 1</i>
<i>Upper explosion limit:</i>	<i>no information available</i>

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*Lower explosion limit:*

*Vapor pressure:*

*not determined*

*Vapor density:*

*No information available.*

*Density:*

*2.5 g/cm<sup>3</sup>*

*Solubility in water:*

*insoluble*

*Coefficient of variation (n-  
Octanol/Water):*

*no information available*

*Auto-ignition temperature:*

*Decomposition temperature:*

*No data available.*

*Viscosity, dynamic:*

*not available*

*Explosive properties:*

*not available*

*Oxidizing properties:*

*no information available*

*Bulk density:*

### 9.2. Further Information

*Solubility in solvents:*

*Viscosity, kinematic:*

*Burning class:*

*Solvent content:*

*Solid content:*

*Particle size:*

*Other information:*

*Ignition temperature: 340°C*

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## 10. Stability and Reactivity

### 10.1. Reactivity

*Stable if used according to specifications.*

### 10.2. Chemical Stability

*No decomposition if used according to specifications.*

### 10.3. Possibility of Hazardous Reactions

*Dust can form explosive mixtures with air.*

### 10.4. Conditions to Avoid

*Conditions to avoid:*

*Avoid contact with heat, sparks and open fire.*

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*Thermal decomposition:*

10.5. **Incompatible Materials**

*No information available.*

10.6. **Hazardous Decomposition Products**

*No information available.*

10.7. **Further Information**

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11. **Toxicological Information**

11. 1. **Information on Hazard Classes as defined in Regulation (EC) No. 1272/2008**

*Acute Toxicity*

*LD50, oral:*

*No information available*

*LD50, dermal:*

*No information available.*

*LC50, inhalation:*

*< 5 mg/l (4h, rat)*

*Primary effects*

*Irritant effect on skin:*

*No information available*

*Irritant effect on eyes:*

*No information available.*

*Inhalation:*

*No information available.*

*Ingestion:*

*No information available*

*Sensitization:*

*No sensitizing effects known.*

*Mutagenicity:*

*No mutagenic effects known.*

*Reproductive toxicity:*

*No relevant data found.*

*Carcinogenicity:*

*No relevant data found.*

*Teratogenicity:*

*No information available.*

*Specific target organ toxicity (STOT):*

*Repeated exposure: Not classified based on available information.*

*Single exposure: Not classified based on available information.*

*Aspiration hazard:*

*Not applicable*

11. 2. **Information on other Hazards**

*No further information available.*

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### 12. Ecological Information

#### 12.1. Aquatic Toxicity

*No toxicity expected.*

*Fish toxicity:*

*Daphnia toxicity:*

*Bacteria toxicity:*

*Algae toxicity:*

#### 12.2. Persistency and Degradability

*No information available.*

#### 12.3. Bioaccumulation

*No information available.*

#### 12.4. Mobility

*No information available.*

#### 12.5. Results of PBT- und vPvP Assessment

*On the basis of available data, the product does not contain any PBT or vPvB substances in percentage greater than 0.1 %.*

#### 12.6. Endocrine Disrupting Properties

*No data available.*

#### 12.7. Other Adverse Effects

*Water hazard class:*

*Not hazardous.*

*Behaviour in sewage systems:*

*Further ecological effects:*

*Avoid subsoil penetration. Prevent product from entering drains. Do not contaminate surface water.*

*AOX Value:*

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### 13. Disposal Considerations

#### 13.1. Waste Treatment Methods

*Product:*

*Dispose of according to official national and local regulations. Do not let product enter water systems. Must not be disposed together with household garbage.*

*European Waste Code (EWC):*

*120104 - Metal dust and particles  
100321 - other particulates and dust (including ball-mill dust) containing dangerous substances.*

*Uncleaned packaging:*

*Contaminated packaging must be disposed like the substance.*

*Waste Code No.:*

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### 14. Transport Information

#### 14.1. UN Number

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	<i>ADR, IMDG, IATA</i>	<i>1309</i>
<b>14.2.</b>	<b>UN Proper Shipping Name</b>	
	<i>ADR/RID:</i>	<i>ALUMINIUM-PULVER, ÜBERZOGEN</i>
	<i>IMDG/IATA:</i>	<i>ALUMINIUM POWDER, COATED</i>
<b>14.3.</b>	<b>Transport Hazard Classes</b>	
	<i>ADR Class:</i>	<i>4.1</i>
	<i>Hazard no.:</i>	<i>4.1</i>
	<i>Classification code:</i>	<i>F3</i>
	<i>Tunnel restriction code:</i>	<i>E</i>
	<i>IMDG Class (sea):</i>	<i>4.1</i>
	<i>Hazard no.:</i>	<i>4.1</i>
	<i>EmS No.:</i>	<i>F-G, S-G</i>
	<i>IATA Class:</i>	<i>4.1</i>
	<i>Hazard no.:</i>	<i>4.1</i>
<b>14.4.</b>	<b>Packaging Group</b>	
	<i>ADR/RID:</i>	<i>II</i>
	<i>IMDG:</i>	<i>II</i>
	<i>IATA:</i>	<i>II</i>
<b>14.5.</b>	<b>Environmental Hazards</b>	
		<i>None</i>
<b>14.6.</b>	<b>Special Precautions for User</b>	
		<i>not applicable</i>
<b>14.7.</b>	<b>Maritime Transport in Bulk according to IMO Instruments</b>	
		<i>not applicable</i>
<b>14.8.</b>	<b>Further Information</b>	
		<i>IMDG Code segregation group 15 - Powdered metals</i>

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## 15. Regulatory Information

### 15.1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

*Water hazard class:*

*0, not hazardous (according to the German Regulation AwSV)*

*Local regulations on chemical accidents:*

*Employment restrictions:*

*Restriction and prohibition of application:*

*EC. REACH, Section XVII, Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles, Registered no. 40*

*Technical instructions on air quality:*

### 15.2. Chemical Safety Assessment

*No information available.*

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### 15.3. Further Information

*Regulation (EC) 1005/2009 - Substances that Deplete the Ozone Layer: not regulated / not applicable*

*Regulation (EU) 2019/1021 - Persistent organic pollutants: not regulated / not applicable*

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### 16. Other Information

*This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.*