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

### 1.1. Product identifier

Product form : Substance  
Trade name/designation : ALUMINIUM  
Chemical name : Aluminium  
EC-No. : 231-072-3  
CAS-No. : 7429-90-5  
REACH registration No : 01-2119529243-45  
Product group : Trade product

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

#### 1.2.1. Relevant identified uses

Use of the substance/mixture : Alloy,  
particulate,  
Powder,  
Article,  
Recycling,  
Welding,  
Spraying,  
Packaging material,  
Molten form,  
Coating .

#### 1.2.2. Uses advised against

No data available

### 1.3. Details of the supplier of the safety data sheet

Trafigura Ventures V.B.V.  
Evert van de Beekstraat 1-82  
The Base, Tower B - 5th Floor  
1118 CL Schiphol - The Netherlands  
T +31 20 504 1800  
[TrafiguraReach@trafigura.com](mailto:TrafiguraReach@trafigura.com)

### 1.4. Emergency telephone number

Emergency number : +32 3 575 03 30  
This telephone number is available 24 hours per day, 7 days per week.


Country	Official advisory body	Address	Emergency number
Ireland	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	+353 1 809 21 66 (public, 8am - 10pm, 7/7) +353 01 809 2566 (Professionals, 24/7)
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit	Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle	0844 892 0111 (UK only, 24/7, healthcare professionals only)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Not classified

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## **2.2. Label elements**

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

Not applicable.

## **2.3. Other hazards**

Other hazards : Risk of dust explosion.

## **SECTION 3: Composition/information on ingredients**

### **3.1. Substances**

Substance name : ALUMINIUM  
CAS-No. : 7429-90-5  
EC-No. : 231-072-3

Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Aluminium	(CAS-No.) 7429-90-5 (EC-No.) 231-072-3 (EC Index) 013-002-00-1	>= 95	Water-react. 2, H261 Flam. Sol. 1, H228

Full text of H-statements: see section 16

### **3.2. Mixtures**

Not applicable

## **SECTION 4: First aid measures**

### **4.1. Description of first aid measures**

Additional advice : Never give anything by mouth to an unconscious person. Show this safety data sheet to the doctor in attendance. Treat symptomatically.

Inhalation : Keep at rest. Provide fresh air. In case of doubt or persistent symptoms, consult always a physician.

Skin contact : Wash skin with plenty of water. In case of doubt or persistent symptoms, consult always a physician.

Eyes contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.

Ingestion : Rinse mouth. In case of doubt or persistent symptoms, consult always a physician.

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

Inhalation : as offered : This product has no known adverse effect on human health. May be irritating. AFTER INHALATION OF DUST:


Skin contact : No adverse effects are expected.

Eyes contact : No adverse effects are expected. Dust may cause painful eye irritation and tearing.

Ingestion : No adverse effects are expected.

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

No data available

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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Solid form : Co-ordinate fire-fighting measures to the fire surroundings. powdered form : extinguishing powder (Type D). Dry sand .

Unsuitable extinguishing media : Strong water jet. Halogenated compounds.

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

Specific hazards : In molten state: Reacts violently with water. metal oxides . Melting alone may cause steam explosion on contact with water. Hazardous decomposition products AlOx. Do not allow run-off from fire-fighting to enter drains or water courses. Dispose of waste in accordance with environmental legislation.

### 5.3. Advice for firefighters

Firefighting instructions : Use personal protective equipment as required. In case of fire: Wear self-contained breathing apparatus.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

For non-emergency personnel : Use personal protective equipment as required. Reference to other sections: 8 . Provide adequate ventilation. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

#### 6.1.2. For emergency responders

No data available

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect in closed and suitable containers for disposal. Dispose of contaminated materials in accordance with current regulations.

### 6.4. Reference to other sections

No data available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid dust formation. Provide adequate ventilation. During handling operations: Do not breathe vapours/dust.

Hygiene measures : Keep good industrial hygiene.

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


Technical measures : Keep container tightly closed in a cool, well-ventilated place. Refer to the detailed list of incompatible materials in section 10 Stability/Reactivity. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

### 7.3. Specific end use(s)


No data available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

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Aluminium (7429-90-5)		
Austria	MAK (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (inhalable fraction)
Austria	MAK Short time value (mg/m <sup>3</sup> )	20 mg/m <sup>3</sup> (inhalable fraction)
Belgium	Limit value (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Bulgaria	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (metal dust) 1,5 mg/m <sup>3</sup> (respirable fraction)
Croatia	GVI (granična vrijednost izloženosti) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (total dust) 4 mg/m <sup>3</sup> (respirable dust)
Czech Republic	Expoziční limity (PEL) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (dust)
Denmark	Grænseværdie (langvarig) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (dust, fume and powder, total) 2 mg/m <sup>3</sup> (dust and powder, respirable)
Estonia	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (total dust) 4 mg/m <sup>3</sup> (respirable dust)
France	VME (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (metal) 5 mg/m <sup>3</sup> (dust)
Greece	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (inhalable fraction) 5 mg/m <sup>3</sup> (respirable fraction)
Hungary	AK-érték	6 mg/m <sup>3</sup> (respirable dust)
Ireland	OEL (8 hours ref) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup> (respirable fraction)
Ireland	OEL (15 min ref) (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup> (calculated-respirable dust)
Latvia	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Lithuania	IPRV (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (inhalable fraction) 2 mg/m <sup>3</sup> (respirable fraction) 1 mg/m <sup>3</sup>
Poland	NDS (mg/m <sup>3</sup> )	2,5 mg/m <sup>3</sup> (inhalable fraction) 1,2 mg/m <sup>3</sup> (respirable fraction)
Portugal	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (metal dust)
Romania	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup> (dust) 1 mg/m <sup>3</sup> (fume)
Romania	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (dust) 3 mg/m <sup>3</sup> (fume)
Slovakia	NPHV (priemerná) (mg/m <sup>3</sup> )	1,5 mg/m <sup>3</sup> (metal) 6 mg/m <sup>3</sup> (total aerosol)
Spain	VLA-ED (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (dust)
Sweden	nivågränsvärde (NVG) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (total dust) 2 mg/m <sup>3</sup> (respirable dust)
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (inhalable dust) 4 mg/m <sup>3</sup> (respirable dust)
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	30 mg/m <sup>3</sup> (calculated-inhalable dust) 12 mg/m <sup>3</sup> (calculated-respirable dust)
Norway	Grenseverdier (AN) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (pyrotechnical-powder)
Norway	Grenseverdier (Korttidsverdi) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (pyrotechnical, value calculated-powder)
Switzerland	MAK (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup> (respirable dust)
Australia	TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (dust) 5 mg/m <sup>3</sup> (welding fume)
Canada (Quebec)	VEMP (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
USA - ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup> (respirable particulate matter)

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<b>Aluminium (7429-90-5)</b>		
USA - NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> (respirable dust)
USA - OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> (respirable fraction)

<b>ALUMINIUM (7429-90-5)</b>	
DNEL/DMEL (workers)	
Long-term - local effects, inhalation	3,72 mg/m <sup>3</sup>
DNEL/DMEL (general population)	
Long-term - systemic effects, oral	3,95 mg/kg bodyweight/day
PNEC (STP)	
PNEC sewage treatment plant	(factor 10) 20 mg/l


## **8.2. Exposure controls**

Engineering measure(s)	: Use only in area provided with appropriate exhaust ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Use adequate ventilation and/or engineering controls in high temperature processing to prevent exposure to vapours.
Hand protection	: Not required for normal conditions of use . Protective gloves (EN 388, EN 407)
Eye protection	: Not required for normal conditions of use . Safety glasses with side-shields (EN 166, EN 407)
Body protection	: Overalls, apron and boots recommended. The melted product can cause severe burns. Flame-retardant protective clothing
Respiratory protection	: Not required for normal conditions of use . Avoid dust formation. In the case of respirable dust and/or fumes, use self-contained breathing apparatus. (EN 137). Effective dust mask (EN 149). Full face mask (EN 136) (EN 136). Half-face mask (DIN EN 140) (EN 140). Filter type: P (EN 143).

## **SECTION 9: Physical and chemical properties**

### **9.1. Information on basic physical and chemical properties**

Physical state	: Solid
Appearance	: Solid.
Colour	: No data available.
Odour	: No data available.
Odour threshold	: No data available
pH	: Not applicable
Relative evaporation rate (butylacetate=1)	: No data available
Melting / freezing point	: ~ 660 °C
Freezing point	: No data available
Initial boiling point and boiling range	: ~ 2467 °C
Flash point	: Not applicable
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Vapour density	: No data available
Relative density	: No data available

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Density : ~ 2,702 g/cm<sup>3</sup> (20°C)  
 Solubility : No data available  
 Partition coefficient n-octanol/water : No data available  
 Kinematic viscosity : No data available  
 Dynamic viscosity : No data available  
 Explosive properties : No data available  
 Oxidising properties : Not applicable.  
 Explosive limits : Not applicable

**9.2. Other information**

No data available

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Reference to other sections: 10.5.

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

No data available

**10.4. Conditions to avoid**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Exposure to moisture.

**10.5. Incompatible materials**

Incompatible with acids and bases. Oxidising agent .

**10.6. Hazardous decomposition products**

AlOx.

**SECTION 11: Toxicological information**


**11.1. Information on toxicological effects**

Acute toxicity : Not classified  
 Skin corrosion/irritation : Not classified  
 pH: Not applicable  
 Serious eye damage/irritation : Not classified  
 pH: Not applicable  
 Respiratory or skin sensitisation : Not classified  
 Germ cell mutagenicity : Not classified  
 Carcinogenicity : Not classified  
 Reproductive toxicity : Not classified  
 STOT-single exposure : Not classified  
 STOT-repeated exposure : Not classified  
 Aspiration hazard : Not classified

**SECTION 12: Ecological information**

**12.1. Toxicity**

Environmental properties : not hazardous.

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**12.2. Persistence and degradability**

<b>ALUMINIUM (7429-90-5)</b>	
Persistence and degradability	No data is available on the product itself.

**12.3. Bioaccumulative potential**

No data available

**12.4. Mobility in soil**

No data available

**12.5. Results of PBT and vPvB assessment**

No data available

**12.6. Other adverse effects**

No data available

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

Product/Packaging disposal recommendations : Dispose of contaminated materials in accordance with current regulations. Do not allow to enter into surface water or drains.  
 European waste catalogue (2001/573/EC, 75/442/EEC, 91/689/EEC) : Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

**SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.2. UN proper shipping name</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

**14.6. Special precautions for user**

**- Overland transport**


No data available

**- Transport by sea**

No data available

**- Air transport**

No data available

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**- Inland waterway transport**

No data available

**- Rail transport**

No data available

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

Not applicable

**SECTION 15: Regulatory information**

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

**15.1.1. EU-Regulations**

No REACH Annex XVII restrictions

ALUMINIUM is not on the REACH Candidate List

ALUMINIUM is not on the REACH Annex XIV List

**15.1.2. National regulations**

**Germany**

Reference to AwSV : Water hazard class (WGK) nwg, Non-hazardous to water (KBwS-Beschluss; ID No. 1443)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

**Netherlands**

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

**15.2. Chemical safety assessment**


**SECTION 16: Other information**

Indication of changes:

1		Modified	
15		Modified	
16		Modified	

Sources of key data used to compile the datasheet : European Chemicals Bureau.



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Full text of H- and EUH-statements:

Flam. Sol. 1	Flammable solids, Hazard Category 1
Water-react. 2	Substances and Mixtures which, in contact with water, emit flammable gases, Hazard Category 2
H228	Flammable solid
H261	In contact with water releases flammable gases.

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830  
Classification according to Regulation (EC) No. 1272/2008 [CLP]  
Labelling according to Regulation (EC) No. 1272/2008 [CLP]

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