

## SAFETY DATA SHEET

Aluminum alloys for foundry and desox application

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### SECTION 1. Identification of the substance/mixture and of the company

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**1.1 Product identifier:** Aluminum alloys for foundry and desox application

**1.2 Relevant identified uses of the product and uses advised against**

**Intended use:**

**1.3 Details of the supplier of the safety data sheet**

**Manufacturer:** Stena Aluminium AB,  
**Address:** Box 44  
SE 343 21 Älmhult  
**Country:** Sweden  
**Tel.** +46010 445 9500  
**Contact person:** Technical Manager  
**Email:** info@stenaaluminium.com  
**Web:** www.stenaaluminium.com

**1.4 Telephone emergency number:** 112

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### SECTION 2. Hazards identification

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**2.1 Classification of the substance or mixture**

**According to regulation (EC) No 1272/2008 (CLP)**

The product is not classified.

**2.2 Label elements**

**According to regulation (EC) No 1272/2008 (CLP)**

**Signal word:** Not required.

**Hazard statements:** Not required.

**Precautionary statements:** Not required.

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### 2.3 Other hazards

The substance does not meet the PBT or vPvB criterion according to Regulation (EU) 1907/2006, Annex XIII. In case of unsuitable storage, the moisture content of the air can form condensation on the surface of the metal. If moist ingots are added to liquid metal, explosion may occur, which may cause liquid metal to be thrown out of the oven.

Dust and smoke can be formed during processes such as welding, grinding and sawing. The composition of these will be the same as for the product, except for welding, where the composition also depends on the welding method and "filler material".

## SECTION 3. Composition/information on ingredients

### 3.2 Mixtures

Declaration of ingredients according to CLP (EG) No 1272/2008:

Substance	CAS-no EG-no	REACH-regno Indexno	Weight %	Classification
Aluminium (Al)	7429-90-5 231-072-3	01-2119529243-45	> 62	Not classified
Silicon (Si)	7440-21-3 231-130-8	01-2119480401-47	< 15	Not classified
Iron (Fe)	7439-89-6 231-096-4	01-2119462838-24	< 2	Not classified
Magnesium (Mg)	7439-95-4 231-104-6	01-2119537203-49	< 6	Not classified
Copper (Cu)	7440-50-8 231-159-6	01-2119480154-42	< 4	Not classified
Manganese (Mn)	7439-96-5 231-105-1	01-2119449803-34	< 0,6	Not classified
Titanium (Ti)	7440-32-6 231-142-3	01-2119484878-14	< 0,2	Not classified
Zinc (Zn)	7440-66-6 231-175-3	01-2119467174-37	< 10	Not classified
Lead (Pb)	7439-92-1 231-100-4	01-2119513221-59	< 0,1	Not classified
Tin (Sn)	7440-31-5 231-141-8	01-2119486474-2	< 0,2	Not classified
Nickel (Ni)	7440-02-02 31-111-4	01-2119438727-29	< 0,3	Skin Sens. 1 H317

#### Trace elements in alloy:

#### Weight %

Na and Sr

< 0,1

For full text of the H - statements and other abbreviations see section 16 "Other information".  
Substances without classification may have community workplace exposure limits available.

## SECTION 4. First aid measures

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### 4.1 Description of first aid measures

**Inhalation:** Not relevant for normal use. In case of irritation caused by dust, move to fresh air.

**Skin contact:** Not relevant for normal use. Wash skin with water and mild detergent.

**Eye contact:** Not relevant for normal use. Rinse the eyes from dust and shavings with water or saline. If symptoms persist, consult doctor for medical assessment.

**Ingestion:** Inte relevant under normal användning.

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

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

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## SECTION 5. Firefighting measures

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**Flammable properties:** The metal is not flammable, except in finely divided form. Fine particles can be formed during grinding, sawing and polishing.

### 5.1 Extinguishing media

**Suitable extinguishing media:** Använd släckningsmedel som pulver eller torr sand.

**Extinguishing media which must not be used for safety reasons:** Do not use water or halon extinguishers.

**5.2 Special hazards arising from the substance or mixture:** Not any known.

**5.3 Advice to firefighters:** Wear self-contained breathing apparatus and full protective clothing.

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## SECTION 6. Accidental release measures

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

Avoid treatment that generates dust.

See section 8.

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## 6.2 Environmental precautions

Not relevant under normal conditions.

## 6.3 Methods and material for containment and cleaning up

Material in the form of dust should be collected in suitable containers. Dust can be vacuumed.

## 6.4 Reference to other sections

See advice in Section 8.

For waste disposal, see section 13.

# SECTION 7. Handling and storage

## 7.1 Precautions for safe handling

Avoid handling that generates dust. Avoid ignition sources (eg welding) in areas with high dust concentration. Use local exhaust ventilation and good general ventilation when grinding, sawing and polishing

## 7.2 Conditions for safe storage, including any incompatibilities

Store the product dry.

## 7.3 Specific end use(s)

# SECTION 8. Exposure controls/personal protection

## 8.1 Control parameters

### Occupational Exposure Limits

According to EH40/2005 Workplace exposure limits.

Substance	ppm	mg/m <sup>3</sup>	Interval	Category	Anmärkningar
Aluminium, metal		10	8 hours	TWA	Inhalable dust
Aluminium, metal		4	8 hours	TWA	Respirable dust
Copper (Cu), dust and mists		1	8 hours	TWA	
Copper (Cu), dust and mists		2	15 minutes	STEL	
Silicon (Si), dust		10	8 hours	TWA	Inhalable dust
Silicon (Si), dust		4	8 hours	TWA	Respirable dust
Manganese (Mn)		0,5	8 hours	TWA	
Nickel (Ni)		0,5	8 hours	TWA	

## 8.2 Exposure control

### 8.2.1 General

In normal handling of aluminum in solid form, none of the occupational exposure limits for the metals will be exceeded.

### 8.2.2 Personal protection

**8.2.2.1 Eye protection:** When sawing, grinding and polishing the product, eye protection should be used. If such work is performed, there should be access to eye wash.

**8.2.2.2 Hand protection:** Protective gloves should be used when handling the product. When sawing, grinding and polishing the product, wear protective gloves.

**8.2.2.3 Respiratory protection:** When sawing, grinding and polishing the product, particle filtering half mask according to EN149: 2001, Class FFP2, must be used. Use spot local exhaust ventilation when sawing, grinding and welding the product.

### 8.2.3 Reduction of release to the environment

Not relevant under normal conditions.

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## SECTION 9. Physical and chemical properties

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### 9.1 Information on basic physical and chemical properties

<b>Appearance</b>	Solid
<b>Colour</b>	From grey to silver grey
<b>Odour</b>	Petroleum
<b>Melting poin interval (°C)</b>	570-660
<b>Boiling point interval (°C)</b>	2 300-2 500

### 9.2 Other information

No data available/not applicable.

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## SECTION 10. Stability and reactivity

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### 10.1 Reactivity

Stable under normal temperature conditions.

## 10.2 Chemical stability

Stable under normal temperature conditions.

## 10.3 Possibility of hazardous reactions

Avoid dust formation. At high dust concentrations, particles of the product suspended in the air can easily spread flames, generate severe pressure or explode. Both ignition sensitivity and explosion risk increase with reduced particle size.

## 10.4 Conditions to avoid

Acids, bases, oxidants, halogenated hydrocarbons and metal oxides (see below).

## 10.5 Incompatible materials

## 10.6 Hazardous decomposition products

Reaction with acid and base leads to the formation of flammable hydrogen (H<sub>2</sub>). Aluminum metal can react strongly with oxidizing agents, halogenated hydrocarbons and metal oxides with high heat generation.

Moist or wet product forms flammable hydrogen if it is added to molten aluminum due to water decomposition

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# SECTION 11. Toxicological information

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## 11.1 Information on toxicological effects

**General toxicological information:** Not classified as hazardous to health. There is no toxicological information about the product.

**Eye Irritation:** Dust may irritate the eyes and cause dryness.

**Skin irritation:** May be irritating to sensitive skin.

**Inhalation:** Fine dust may irritate and may cause dryness of mucous membranes.

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# SECTION 12. Ecological information

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## 12.1 Toxicity

**General toxicological information:**

Not classified as hazardous to the environment.

#### **12.2 Persistence and degradability:**

Aluminum has very limited mobility in the environment under normal ambient conditions. The product consists of elements.

**12.3 Bioaccumulative potential:** The product is not bioaccumulative.

**12.4 Mobility in soil:** The product is not soluble in water.

**12.5 Results of PBT and vPvB assessment:** The product is not toxic or bioaccumulative.

**12.6 Other adverse effects:**

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### **SECTION 13. Disposal considerations**

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#### **13.1 Waste treatment methods**

Aluminum scrap must be recycled.

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### **SECTION 14. Transport information**

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#### **14.1 UN number**

Not dangerous goods according to RID, ADR, ADNR and IMDG.

#### **14.2 UN proper shipping name**

#### **14.3 Transport hazard class(es)**

#### **14.4 Packaging group**

#### **14.5 Environmental hazards**

#### **14.6 Special precautions for user**

#### **14.7 Transport in bulk according to Annex I of MARPOL**

## **SECTION 15. Regulatory information**

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

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

### **Occupational Exposure Limits**

According to EH40/2005 Workplace exposure limits.

**15.2 Chemical safety assessment:** Has not been performed.

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## **SECTION 16. Other information**

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### **Explanation to hazard and precautionary statements**

#### **Hazard statements:**

Skin Sens. 1    H317            May cause an allergic skin reaction.

This safety data sheet has been produced according to REACH (EG) No 1907/2006, Article 31.

This safety data sheet has been developed by Chemgroup Scandinavia AB.

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