

SAFETY DATASHEET

1. Identification of the substance/preparation and of the company/undertaking

Date issued	16/06-2006
Product name	Aluminium
Formula	Al

Manufacturer/Importer/Reseller

Company name	Hydro Aluminium Rolled Products
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2. Composition/information on ingredients

CAS no.	EC no.	Component name	Contents	Labelling/classification
7429-90-5	231-072-3	Aluminium Mg and Mn, alloy	60- 100 %	F; R15, R17
Column headings	CAS no. = Chemical Abstracts Service; EU (Einecs or Elincs number) = European inventory of Existing Commercial Chemical Substances; Ingredient name = Name as specified in the substance list (substances that are not included in the substance list must be translated, if possible). Contents given in; %, %wt/wt, %vol/vol, mg/m ³ , ppb, ppm, weight%, vol%			
HH/HF/HE	T+ = Very toxic, T = Toxic, C = Corrosive, Xn = Harmful, Xi = Irritating, E = Explosive, O = Oxidizing, F+ = Extremely flammable, F = Very flammable, N = Environmental hazard			
Component comments	See section 16 for the full text of the R Phrases declared above.			

3. Hazards identification

Hazard description	<p>GENERAL Not regarded as hazardous under current legislation.</p> <p>HEALTH The finished product is delivered as a moulded metalbar or similar. When in delivery state, the product has no known health hazards. Heating of product may give hazardous oxides of metal.</p> <p>FIRE AND EXPLOSION The product is not flammable and represent no danger of explotion. Pulverized product may imply risk of dust explotion.</p> <p>ENVIRONMENT Not supposed to be dangerous for the environment.</p>
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4. First aid measures

General	Immediately move the patient from exposure. Move to fresh air, keep the patient warm and at rest. If breathing is difficult, give oxygen (trained personel). Contact a physician if symptoms persists or if doubt about treatment.
Inhalation	See "General".
Skin contact	Flush skin with large amounts of water. Get medical advice if irritation persists.
Eye contact	Flush throughly with water (eyes open) for at least 15 minutes. Get medical advice if

	irritation persists.
Ingestion	If dust are swallowed, rinse the mouth and drink plenty of water. Seek medical advice.
Information for health personnel	Persons with reduced pulmonary capacity, respiratory deseases and asthma, emphysema, cronic bronchitis etc. can get worse if inhalation of dust/fumes. If persons with injury or desease on nervous system, blood or kidneys, are exposed, these should be medical examined. Medical examination: Persons who are regularly exposed to metalaerosols and metal-fumes should have an annual neurological check and control of pulmonary function. The national poison center (Giftinformasjonsentralen) can give information about the toxicity of chemicals and advice for treatment of poisoning, telephone +47 22 59 13 00.

5. Fire-fighting measures

Suitable extinguishing media	Choose appropriate extinguishing media for surrounding fire. If fire in dry powder, use dry sand or fire extinguishant in class D.
Fire and explosion hazards	The product is not flammable, and represents no risk of explotion. Pulverized substance may ignite and involves risk of dustexplosion. Burning dust from this material releases hazardous gas/smoke with metallic oxides.
Personal protection equipment	Full protective clothing and self-contained breathing apparatus.
Other Information	Water or other surface contamination on metal inserted into an oven, may cause an explotion when melting. Therefore the product should be stored dry and preheated before inserted into the oven. Do not try to move burning metal when fire-fighting.

6. Accidental release measures

Personal precautions	Refer to protective measures listed in sections 7 and 8. Avoid generation of dust and inhalation of dust. Eliminate all ignition sources.
Environmental precautions	Avoid pollution of air and water. Metal powder or dust can affect water quality.
Methods for cleaning	Collect in dry containers. If dust or powder, use vacuum cleaner with high efficiency particelfilter. Dispose of in accordance with section 13. Clean contaminated area with water.

7. Handling and storage

Handling	Contact with humidity under melting operation may lead to explotion. Pulverized substance may ignite and involves risk of dust explotion. Avoid dustgeneration. Avoid inhalation of dust. Avoid contact with skin and eyes. Avoid inhalation of fumes from melted product. Avoid heating, sparks and open flame.
Storage	Store in dry, well ventilated area. Containers must be kept tightly closed. Keep metal dust separated from flames and ignition sources. Avoid contact with mineral acids. Do not allow eating, drinking or smoking in working area.

8. Exposure controls/personal protection

Exposure limit values

CAS no.	EC no.	Component name	TWA (8h)	ppm/mg/m3<STEL (15m)	ppm/mg/m3<Year
1344-28-1	215-691-6	Aluminiumoksid	10,0	mg/m ³	2003

Exposure controls

Occupational exposure controls	Provide good ventilation. Eyewash facilities should be available at the workplace. Avoid handling which generates metallic dust. Contact with water under melting operation may lead to an explotion. If humidity present, preheat product before inserting into melt. Do not allow eating, drinking or smoking near working area. Wash hands after working with the product, and before eating, smoking or visiting toilet.
Respiratory protection	In case of dust formation, use respirator with particulate filter P2.
Hand protection	Wear protective gloves of textile/leather. The permeability of the glove material versus this chemical will vary with the tickness of the glove material, the exposure and type of work.
Eye protection	Wear eye protection if there is a possibility of eye contact. Do not wear contact lenses.

Skin protection (other than of the hands)	Wear suitable protective clothing as needed.
Other Information	Personal protective equipment shall be CE-marked and shall be tested according to relevant CEN standard.

9. Physical and chemical properties

Physical state	Solid, metal bar
Odour	Odourless
Colour	Silver
Solubility in water	Unsoluble
Melting point/melting range	Value: 658 °C

10. Stability and reactivity

Materials to avoid	Water, strong acids and bases.
Hazardous decomposition products	Metals and oxides of metals
Stability	Exposed to strong acids or strong alkalines, flammable Hydrogen (H ₂) may be formed. Hydrogen is explosive in concentrations above 4%. The product has a low reactivity with most chemicals.

11. Toxicological information

Other information regarding health hazards

General	Product free from dust do not represent any health hazard. Cutting, welding, grinding etc. generates dust, smoke or particles containing the product components. When heated above the Melting Point, there will be generated metalfumes which might be oxidized and condensated to or on respirable particles. Inhalation of dust, fumes and aerosols may imply a health hazard. The product contains Manganese. Exposure to dust, smoke or fumes of Manganese, may give irritation in respiratory system and lungs, and Metal fever. Repeated exposure for high concentrations of Manganese may give permanent lung damage and permanent brain damage with symptoms identical to Parkinson's Disease (in serious cases). Manganese may also cause injury in liver and anemia.
Inhalation	See "General". Metall dust/-fumes may irritate respiratory system. Overexposure to dust or fumes may give chronic health effects (shortness of breath, cough, loss of lungfunction, fibrosis and following effects to heart).
Skin contact	Metall dust/-fumes may provide skin irritation.
Eye contact	Dust irritates eyes.
Ingestion	Dust/particles/vapours may irritate mucous membranes.

12. Ecological information

Other ecological information

Persistence and degradability	Not readily biodegradable. The product contains heavy metals that may accumulate in the nature. The heavy metals in the product may accumulate in living organisms.
Other adverse effects / Remarks	No ecological data available for the product. Not soluble in water.

13. Disposal considerations

Other Information	Not classified as hazardous waste. Resirculate if possible. Dispose of in accordance with local regulations.
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14. Transport information

Other applicable information.	The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).
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15. Regulatory information

Composition on the label	Aluminium: 60 - 100 % ,Mg and Mn, alloy: %
R phrases	The product does not require labelling.

S phrases	S7/8 Keep container tightly closed and dry.
References (laws/regulations)	Norwegian List of Dangerous Substances (Annex I, included 29. ATP) (Statens forurensningstilsyn, Arbeidstilsynet, Direktoratet for samfunnssikkerhet og beredskap). Norwegian occupational exposure limit values (Administrative normer for forurensning i arbeidsatmosfære, Arbeidstilsynet, best.nr. 361). ADR, RID, IMDG, IATA, Micromedex Tomes CPS System. Norwegian Regulation for Classification and Labelling of Dangerous Chemicals, Norwegian Regulation for Material Safety Data Sheets, European Waste Catalogue, The Merck Chemical Database.

16. Other information

List of relevant R-phrases (in section 2)	R15 Contact with water liberates extremely flammable gases. R17 Spontaneously flammable in air.
Supplier's notes	This data sheet is prepared by Hydro Production Partner in accordance with the regulations in force. Hydro Production Partner is not responsible for any errors in the information received from the manufacturer/supplier. The manufacturer/supplier mentioned in section 1 is legally responsible for the contents of this safety data sheet.