

## GHS Material Safety Data Sheet

MSDS No. : ALE02WAEG

Date Issued:2012/06/20

### Section 1. Identification of the substance or mixture and of the supplier

#### 1.1 Product Information

Product name: **Al Aluminum, wire**

Product number:	Purity	Size (mm)	Product number:	Purity	Size (mm)
ALE01WB	99.99%(4N)	0.5, ca 0.53 g/m	ALE06WB	99.99%(4N)	3.5, ca 25.96g/m
ALE02WB	99.99%(4N)	1, ca 2.1 g/m	ALE07WB	99.99%(4N)	5, ca 53g/m
ALE03WB	99.99%(4N)	1.5, ca 4.77 g/m	ALE08WB	99.999%(5N)	1.5
ALE04WB	99.99%(4N)	2, ca 8.5 g/m	ALE09WB	99.999%(5N)	2
ALE05WB	99.99%(4N)	3, ca 19.1 g/m	ALE10WB	99.999%(5N)	6.35

#### 1.2 Company Information:

Manufacturer : Kojundo Chemical Laboratory Co., Ltd  
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### Section 2. Hazards identification

#### GHS Classification

Health Hazards	Environmental Hazards	Physical Hazards
Specific target organ toxicity, repeated exposure ; Category 1	Hazardous to the aquatic environment, chronic toxicity ; Category 4	Flammable solids : Not classified Pyrophoric solids : Not classified Self-heating substances and mixtures : Not classified Substances and mixtures which, in contact with water, emit flammable gases : Not classified

GHS Label: C



Pictograms or symbols

Warning word: **DANGER**

Hazard information	Description of precaution
<p><b>Causes damage to organ (Lung) through prolonged or repeated exposure.</b></p> <p><b>May cause long lasting harmful effects to aquatic life.</b></p>	<p>Avoid breathing dust/fume/spray.</p> <p>Do not eat, drink or smoke when using this product, and wash hands thoroughly after handling.</p> <p>Use only outdoors or in well-ventilated area.</p> <p>Avoid release to the environment and collect spillage.</p> <p>Call a POISON CENTER or doctor/physician if you feel unwell.</p> <p>Dispose of contents/ container in accordance with local/national regulations.</p>

#### Additional hazard information :

Hazards mainly originate in dusting.

With respect to additional hazard information, see Section 11.

### Section 3. Composition / information on ingredients

Chemical or common name:	Aluminum
Chemical formula:	Al
Single Substance or Compound:	Single substance
Composition:	100%
CAS #:	7429-90-5
RTECS#:	BD0330000
TSCA inventory:	listed
EINECS:	2310723

### Section 4. First aid measures

(About dust originated from the products)

Eye contact:	Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.
Skin contact:	Promptly flush contaminated skin with soap or mild detergent and water. Contact physician if irritation continues.
Inhalation:	Remove the exposed person immediately and provide fresh air. Get medical attention.
Ingestion:	Rinse mouth and throat with water. Get medical attention immediately.

### Section 5. Fire fighting measures

Extinguishing media:	This product cannot catch fire. Use media appropriate for surrounding fire.
Fire fighting:	Wear self contained breathing apparatus for fire fighting if necessary. The product is nonflammable.
Combustion products:	Aluminum oxides

### Section 6. Accidental release measures

(About dust originated from the products)

Personal Precautions:	Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its dust/ fume.
Environmental hazard precautions:	Shut off leak if without risk. Prevent flow out to river, etc. so as not to badly affect.
Method for containment and cleaning up:	Indoor leakage: Ventilate as much as possible until the cleaning is completed. Outdoor leakage: Work from the windward and evacuate the leeward crowd. Gather up, pack in closed container as much as possible. Carefully collect remnant and move to a safe place.

### Section 7. Handling and storage

#### Precautions to be taken in handling:

Safe handling:	Use protective wears and local ventilation equipment, if inhalation or skin contact is foreseen.
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#### Precautions to be taken in storage:

General precautions:	Store in a cool, dry place away from incompatible materials. Keep container or bottle tightly closed.
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## Section 8. Exposure controls / personal protection

Exposure guideline:	ACGIH (2008): TLV-TWA = 1 mg/m <sup>3</sup> (Resprable particulate) OSHA (2006): PEL-TWA = 15 mg/m <sup>3</sup> (Total dust) = 5 mg/m <sup>3</sup> (Respirable fraction)
Facility measures:	(In case of dust generating work ) Local ventilation of closed work room or total proper ventilation to prevent inhalation.
Protective ware:	Wear appropriate NIOSH/MSHA-approved respirator, safety goggles, protective gloves.

## Section 9. Physical and chemical properties

Color and Form:	Silver white, odorless.
Chemical formula:	Al
Atomic weight:	26.98
Melting point:	660.32
Boiling point:	2467
Density:	2.6989 g/cm <sup>3</sup>
Solubility	Water: Insoluble(cold water), Reacts and forms hydrogen(hot water). Dissoluble: Inorganic acids except nitric acid, bases.
Flammable:	non-flammable substance
Oxidation:	None

## Section 10. Stability and reactivity

Stability:	Stable in closed container.
Reactivity	
Incompatibility:	Acids, oxidizing agent, acid chlorides, halogens.
Condition to avoid:	Air, moisture.
Hazardous decomposition products:	Aluminum oxides

## Section 11. Toxicological information

Hazards mainly originate in dusting.

Acute toxicity:	GHS ; No data available
Skin corrosive / irritation:	GHS ; No data available
Serious eyes damage / eye irritation:	GHS ; No data available
Respiratory sensitization:	GHS ; No data available
Skin sensitization:	GHS ; No data available
Germ cell mutagenicity:	GHS ; No data available
Carcinogenicity:	GHS ; No data available Carcinogenicity: • ACGIH(2008) A4 Not classifiable as a human carcinogen.
Reproductive toxicity:	GHS ; No data available
Specific target organ toxicity —single exposure:	GHS ; No data available
Specific target organ toxicity —repeated exposure:	GHS ; Category 1 Causes damage to organs(Lung)through prolonged or repeated exposure
Aspiration hazard:	GHS ; No data available

**Section 12. Ecological information**

Ecotoxicity:

Hazards to the aquatic environment

—acute toxicity: GHS ; No data available

Hazards to the aquatic environment

—chronic toxicity: GHS ; Category 4  
May cause long lasting harmful effects to aquatic life

Hazardous the ozone layer:

GHS ; No data available

No Freon or Halon

Fish toxicity:

No data available

Degradability:

No data available

Bioaccumulative potential:

Al biological half-life 550 day,

Rate of absorption oral=0.1, Respiratory tract=0.3

**Section 13. Disposal considerations**Disposal method: User of the product should contract with the local government or licensed  
'Industrial Waste Haulers' for disposal of waste.**Section 14. Transport information**

UN classification: Non-hazards

UN number: None

HS code: 7605.19

Marine pollution: None

Precautions: Container should be transported in a secure position, in a well-ventilated  
vehicle.**Section 15. Regulatory information**

TSCA inventory : listed.

Please refer to any other local / national measures that may be relevant.

**Section 16. Other information**

The information described above is believed to be correct. However, Kojundo Chemical Lab. makes no representation, warranty nor guarantee of any kind with respect to the information on this data sheet or any use of the product based upon this information.