



## Material safety Data Sheet (MSDS)

### Section 1. Chemical Product and Company Information

PRODUCT NAME	Aluminium Wire for Metalizing
CHEMICAL FORMULA	Mixture
PRODUCT USE	Various fabricated Aluminium wire
COMPANY INFORMATION	<b>PT. ADHI JAYA METALINDO</b> Komplek Industri Mekar Jaya, Jl Raya Mauk KM 7, Karet jaya II No. 8 Tangerang Banten

### Section 2. Composition/Information on Ingredient

Composition	Analisis in Percent
Aluminium	99.90
Other (Si, Fe,Cu, Mn, Mg, Ti.)	< 0,10

COMPONENT INFORMATION	Additional compound that may be formed or added during processing are listed in section 7.
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### Section 3. Hazard Identification

EMERGENCY OVERVIEW	<p>Solid. Silvery. Odorless. Non-combustible. Small chips, fine turning and dust from processing may be readily ignitable.</p> <p>Explosion/fire hazards may be present when (see section 5,6 and 9 for additional information):</p> <ul style="list-style-type: none"><li><input type="checkbox"/> Dust or fine are dispersed in the air.</li><li><input type="checkbox"/> Chips, dust or fines are in contact with water.</li><li><input type="checkbox"/> Dust or fines are in contact with certain metal oxides (e.g.rust).</li></ul> <p>Dust and fume from processing can cause irritation of eyes, skin and upper respiratory tract.</p>
POTENSIAL HEALTH EFFECT	<p>(if dust or fumes are generated by processing)</p> <p><b>Eyes</b> : Can cause irritation. <b>Skin</b> : Can cause irritation <b>Inhalation</b> : Can cause irritation of upper respiratory tract and other health effects listed below</p>
HEALTH EFFECT OF INGREDIENT	Alumunium dust, fines and fumes Low health risk by inhalation. Generally considered to be biologically inert (milling, cutting, grinding).
HEALTH EFFECT OF ADDITONAL COMPOUNDS THAT MAY BE FORMED DURING PROCESSING	Alumina (Aluminium oxide) Low health risk by inhalation. Generally considered to be biologically inert.

<b>MEDICAL CONDITION AGGRAVATED BY EXPOSURE TO THE PRODUCT</b>	Asthma, chronic lung disease, and skin rashes.
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#### **Section 4. First Aid Measures**

<b>FIRST AID : EYES</b>	Flush eyes with plenty of water or saline for at least 15 minutes. Consult a physician
<b>FIRST AID : SKIN</b>	Wash skin with soap and water for at least 15 minutes. Consult a physician if irritation persists.
<b>FIRST AID : INHALATION</b>	Remove to fresh air. If unconscious or severely injured, check for clear airway, breathing and presence of pulse. Perform CPR if there is no pulse or respiration. Consult a physician.

#### **Section 5. Fire Fighting Measures**

<b>FLAMMABLE/COMBUSTIBLE PROPERTIES</b>	This product does not present fire or explosion hazards as shipped. Small chips, fine turnings and dust from processing may be readily ignitable
<b>FIRE/EXPLOSION</b>	<p>May be potential hazard under the following conditions:</p> <ul style="list-style-type: none"> <li>▪ Dust or fines dispersed in the air can be explosive. Even a minor dust cloud can explode violently.</li> <li>▪ Chips, dust or fines in contact with water can generate flammable/explosive hydrogen gas. Hydrogen gas could present an explosion hazard in confined or poorly ventilated spaces.</li> <li>▪ Dust or fines in contact with certain metal oxides (e.g. rust). A termite reaction, with considerable heat generation, can be initiated by a weak ignition source.</li> </ul>
<b>EXTINGUISHED MEDIA</b>	<p>Use Class D extinguished agents on dust and fines. Use coarse water spray on chips and tuning.</p> <p>DO NOT USE: Halogenated agents on small chips, dusts, or fines</p>

#### **Section 6. Handling and Storage**

<b>HANDLING/STORAGE</b>	Product should be kept dry. Avoid generating dust. Avoid contact with sharp edges or heated.
<b>REQUIREMENT FOR PROCESSES WHICH GENERATE DUST OR FUMES</b>	<p>If processing of these products includes operations where dust or extremely fine particulate is generated, obtain and follow the safety procedures and equipment guides contained in Aluminium Bulletin F-1 and National Fire Protection Association (NFPA). Cover and reseal partially empty container. Use non-sparkling handling equipment. Provide grounding and bonding where necessary to prevent accumulation of static charges during handling and transfer operations.</p> <p>Local ventilation and vacuum systems must be designed to handle explosive dusts. Dry vacuums and electrostatic precipitators must not be used. Dust collection systems must be dedicated to aluminium dust only and should be clearly labeled as such. Do not co-mingle fines of iron, iron oxide (rust) or other metal oxides.</p> <p>Do not allow chips, fines or dust to contact water, particularly in enclosed area.</p> <p>Avoid all ignition sources. Good housekeeping practices must be maintained</p>

#### **Section 7. Exposure Controls/Personal Protection**

<b>ENGINEERING CONTROLS</b>	Use with adequate explosion-proof ventilation to meet the listed in section 7, Exposure Guidelines
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<b>PERSONAL PROTECTIVE EQUIPMENT RESPIRATORY PROTECTION</b>	Use NIOSH-approved respiratory protection as specified by an industrial Hygienist or other qualified professional if concentrations exceed the limits listed in section8, Exposure Guidelines. Suggested respiratory protection: N95
<b>EYE PROTECTION</b>	Wear safety glasses/goggles to avoid eye contact.
<b>SKIN PROTECTION</b>	Wear appropriate gloves to avoid direct skin contact
<b>EXPOSURE GUIDELINES</b>	<p><b>A: General Product Information</b> No information available for product.</p> <p><b>B: Component Exposure Limits Aluminium</b> ACGIH 10 mg/m<sup>3</sup> TWA (metal dust) OSHA 15 mg/m<sup>3</sup> TWA (total dust); 5 mg/m<sup>3</sup> TWA (respirable fraction)</p> <p><b>C: Exposure Limits for Additional Compound that May be Formed During Processing Alumina (non-fibrous)</b> ACGIH 10 mg/m<sup>3</sup> TWA (particulate matter containing no asbestos and &lt;1% crystalline (silica) OSHA 15 mg/m<sup>3</sup> TWA (total dust) ; 5 mg/m<sup>3</sup> TWA (respirable fraction)</p>

### Section 8. Physical & Chemical Properties

<b>PHYSICAL STATE</b>	Solid	<b>APPEARANCE</b>	silvery
<b>BOILING POINT</b>	Not applicable	<b>MELTING POINT</b>	Range generally 482 – 653 ° c
<b>VAPOUR PRESSURE</b>	Not applicable	<b>VAPOUR DENSITY</b>	Not applicable
<b>SOLUBILITY IN WATER</b>	none	<b>SPECIFIC GRAVITY</b>	See density
<b>DENSITY</b>	Approximately 2,7 g/cm <sup>3</sup>	<b>PH LEVEL</b>	Not applicable
<b>ODOR</b>	none	<b>ODOR THRESHOLD</b>	Not applicable
<b>OCTANOL-WATER COEFICIENT</b>	Not applicable		

### Section 9. Chemical Stability & Reactivity Information

<b>STABILITY</b>	Stable under normal condition of use, storage, and transportation as shipped
<b>CONDITION TO AVOID</b>	Strong acids, strong alkaline, mercury and its compound, copper alloy that installing upstream from aluminium in water. May cause corrosion.

### Section 10. Toxicological Information

<b>HEALTH EFFECTS OF INGREDIENTS</b>	<p><b>A: General Product Information</b> No Information available for product.</p> <p><b>B: Component Analysis – LD50 /LC50</b> Carcinogen city</p> <p><b>A: General Product Information</b> No. information available for product.</p> <p><b>B: Component Carcinogenicity</b> None of this product's components are listed by ACGIH,IARC, or NTP.</p>
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### **Section 11. Ecological Information**

<b>ECOTOXICITY</b>	<b>A: General Product Information</b> No. information available for product <b>B: Component Analysis – Ecotoxicity – Aquatic Toxicity</b> No ecotoxicity data was found for this product's component. <b>Environmental Fate</b> No information available for product.
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### **Section 12. Disposal Consideration**

<b>DISPOSAL INSTRUCTION</b>	Reuse or recycle material whenever possible. Material may be disposed of at an industrial landfill. Observe all federal, state and local environmental regulations
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### **Section 13. Transportation Information**

<b>SPECIAL TRANSPORTATION</b>	None Specified by manufacturer
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### **Section 14. Regulatory Information**

None specified by manufacturer. Observe all federal, state , and local regulations.	
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### **Section 15. Other Information**

<b>PREPARED BY</b>	Quality Assurance
<b>DISCLAIMER</b>	We believe that the information contained is current as of the date of the Material Safety Data Sheet. Since usage of the product is not within the control of AJMET, therefore it is the user's obligation to determine the conditions of safety use of the product.