

# Electrolead

**Technologically Superior  
High Purity  
Aluminium Wire**



**Electrolead (Pune) Pvt. Ltd.** was started in 1989 by Mr. Pranay Gujar who is an Electrical Engineer. Today it is one of the leading manufacturers of high purity aluminum wire in India. These wires are required for metallization of films used in Packaging Industry (Polyester film, BOPP film & Paper) and in the Electronic Industry for manufacturing Film Based Capacitors.

We have a state-of-the-art manufacturing setup in the well developed Chakan Industrial Area of Pune in Maharashtra State India. It has a manufacturing capacity of 3500MT per annum.



### Mission Statement

**We are and would continue to be a Customer Centric Organization, delivering value by offering consistent Quality at competitive prices and to remain technologically superior to competition.**

### Products

We manufacture Aluminium wire in various diameters and purity levels ranging from 99.80% to 99.99%, as specified by customers. This is done by using a specially developed wire drawing process and custom made machinery.

Our high purity Aluminium Wire for metallizing purpose meets the following International Standards.

#### 1080Wire

Aluminium purity minimum 99.80% and wire diameter 1.50mm & above.  
Tensile strength 16 to 18 kg/mm<sup>2</sup> & Elongation above 1%

#### 1090Wire

Aluminium purity minimum 99.90% and wire diameter 1.50mm & above.  
Tensile strength 15 to 16 kg/mm<sup>2</sup> & Elongation above 1%

#### 1199 Wire

Aluminium purity minimum 99.99% and wire diameter 1.50mm & above.  
Tensile strength 13 to 14 kg/mm<sup>2</sup> & Elongation above 1%



### Quality

- Raw material used is completely imported. The chemical composition and purity is maintained as per customer specifications.
- Aluminium Wires manufactured on drawing machine are wound layer to layer on spools (bobbins) by specially developed winding machine. This layer to layer winding enables high-speed feeding on fully automatic and sophisticated metallizing machines.
- Our online diameter checking equipment ensures consistency of the desired diameter. The specially designed de-greasing unit ensures an oil-free and clean wire.
- Tensile strength of the wire of each batch is checked on in house tensile checking machine. The same is maintained as per customer's requirement.
- The wire on each spools is joint-less and the spool weighs 2 kg to 11.5 kgs as per customers requirement. The spools are also developed in-house and manufactured locally. Spools are packed in specially designed corrugated boxes to ensure zero damage.
- All quality records are maintained meticulously and complete traceability is ensured.

### Food Contact Certificate for Aluminium Wire

Ver 1.02 Reviewed on : 20/01/2018

**We hereby Certify that the Aluminium Wire Manufactured and Supplied by us is suitable for direct contact with food, based on the following points-**

1. Our wire complies with REGULATION (EC) No 1935/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 October 2004 on materials and articles intended to come into contact with food and repealing Directives 80/590/EEC and 89/109/EEC
2. We follow good manufacturing practices for materials and articles intended to come into contact with food in accordance to COMMISSION REGULATION (EC) No 2023/2006 of 22 December 2006
3. Our wire complies with EN 602 standard, "Aluminium and aluminium alloys - Wrought products - Chemical composition of semi products used for the fabrication of articles for use in contact with food." and with EN 14287 standard "Aluminium and aluminium alloys - Specific requirements on the chemical composition of products intended to be used for the manufacture of packaging and packaging components."
4. We confirm that the chemical composition of the Aluminium used complies with Directive 94/62/CE, Article 11, Section 1 "Heavy metal concentration levels" in regard to waste.
5. We confirm that our Aluminium wire complies with EU Directive 1907/2006 article 33(1) and its amendments i.e. - REACH
6. We confirm that our classification, labelling and packaging complies with EU 1272/2008

## Aluminium Wire – Technical Data Sheet (ver 1.16)

Material Characteristics	
<b>Type :</b> Aluminium Wire –1080 Grade 99.80% Purity 1090 Grade 99.90% Purity, 1199 Grade 99.99% Purity	<b>Compliance Standards</b>
<b>Dimension :</b> From 1.5mm to 2.4mm $\varnothing \pm 0.02$ mm	<b>ISO 9001:2015;</b> EN-573-3:2008 ; EC 1935/2004; EU 2023/2006; BS EN 602:2004; FDA (21 CFR 178.3910); DIN EN 14287; 94/20/CE art 11 sec. 1; EU Directive 1907/2006 article 33(1) – REACH; Registration No. : 01-2119529243-45-0374; EU 1272/2008
<b>Temper :</b> H18	RoHS 2011/65/EU
<b>EC No. :</b> 231-072-3 CAS No : 7429-90-5	Aluminium supplied is not part of Conflict Minerals

Chemical Composition (Typical)												
Elements Grade	%Si (max)	%Fe (max)	%Cu (max)	%Mn (max)	%Mg (max)	%Zn (max)	%Ti (max)	%Cr (max)	%B (max)	%V (max)	%Ga (max)	%Al
<b>1080 Grade</b>	0.05	0.10	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.04	<b>99.80 to 99.89</b>
<b>1090 Grade</b>	0.05	0.07	0.005	---	---	0.025	0.015	---	---	---	---	<b>99.90 to 99.95</b>
<b>1199 Grade</b>	0.003	0.003	0.005	---	---	0.002	0.002	---	---	---	---	<b>99.990 to 99.995</b>

Mechanical Properties	
Tensile Strength – Typical	1080 Grade : 16 to 18 kgs / sqmm = 150mpa to 180mpa 1090 Grade : 14 to 16 kgs / sqmm = 140mpa to 160mpa 1199 Grade : 12 to 14 kgs / sqmm = 120mpa to 140mpa
Elongation	Over 3%
Dimensional Tolerance in $\varnothing$	$\pm 0.02$ mm
Temper	H18
Certified that the wire is joint free	Yes

Supplied on Plastic Spools							
<p>Layer – on – layer winding assured</p>	<b>Spool Type</b>	<b>Capacity (Kgs)</b>	<b>Flange Dia (fd) mm</b>	<b>Bore Dia (b) mm</b>	<b>Overall Width (w) mm</b>	<b>Traverse (t) mm</b>	<b>Barrel Dia (bd) mm</b>
	EL200	2	200	51	53	45	100
	EL250 A/B	5	250	A=19; B=51	78	68	125
	EL270	6.5	270	51	102	90	150
	EL280 A/B	7	280	A=19; B=51	78	68	125
	EL300B	11	300	51	100	90	125
	EL305B	8	305	38	75	62	120
	EL320A	10	320	38	82	66	120
	EL320B	8	320	51	70	57	127
	EL320C/E	10	320	38	80	66	120
	EL320D	10	320	51	85	73	127
	EL350A	11	350	38	71	58	100
	EL360A	11.5	360	51	70	60	100
	EL360W	14.4	360	51	85	73	100

Packing
<ul style="list-style-type: none"> <li>■ Packing film is wrapped on the final layer of Aluminium wire to protect it from any contamination.</li> <li>■ Spools are packed in corrugated boxes with corrugated sheets used as spacers between two spools</li> <li>■ Boxes are then packed on a pallet or supplied loose as per customer requirement</li> <li>■ Pallets are designed to ensure stuffing of maximum quantity in a 20ft container</li> <li>■ Internal Corrugated solid angles are used to give additional strength to pallets</li> <li>■ Pallets are finally wrapped with packing film</li> </ul>

Product Identification and Traceability
<ul style="list-style-type: none"> <li>■ Individual Spools are labeled with Grade of Aluminium and the Diameter is mentioned. Every spool is numbered and barcoded.</li> <li>■ Individual Boxes are labeled, numbered and barcoded.</li> <li>■ Batch ID is mentioned in packing list.</li> <li>■ If boxes are packed on a pallet, the pallet is numbered and labeled.</li> </ul>

**1. Product Manufacturer / Identification**

- Product Identification : Aluminium Wire
- Recommended Use : For Metallisation of Film
- Manufacturer : Electrolead (Pune) Pvt. Ltd.
- Head Office : Gat No.146, Mahalunge, Taluka Khed, District Pune, India  
Post Code : 410501. Tel : +91 9272212120. Email : info@electrolead.co.in

**2. Composition**

- Chemical Characterisation : Aluminium  
Form : Wire      Odour : None      Color : Silver grey
- The product does not contain any hazardous substances, refer to our Food Contact Certificate.
- Complies with the following standards : EN-573-3:2008 ; EC 1935/2004; EU 2023/2006; BS EN 602:2004; FDA (21 CFR 178.3910); DIN EN 14287; 94/20/CE art 11 sec. 1; EU Directive 1907/2006 article 33(1) – REACH; EU 1272/2008; RoHS 2011/65/EU
- EC No. : 231-072-3 CAS No : 7429-90-5
- Aluminium supplied is not part of Conflict Minerals.

**3. Hazard Identification**

No Specific danger is associated with the normal industrial utilisation of the product. However, it is to be considered that wire should not be left loose outside the spool to avoid tripping of personnel on floor. Aluminium is a good conductor of electricity, hence the wire should be kept away from electrical power sockets. Ensure that the loose end of the wire remaining in the spool is locked in the locking hole provided on the spool.

**4. First Aid Measures**

- Inhalation/ingestion : Considering the physical form of the product, inhalation and/or ingestion are not likely to be possible during normal use.
- Skin Contact : In case of skin injuries due to the cut end of wire, seek medical assistance.
- Eye Contact : Protective Eye Wear (Goggles) should be worn while handling the wire.

**5. Fire Fighting Measures**

- Aluminium Wire is not inflammable and hence does not need any specific fire fighting measures. However the packing material is corrugated paper and spool is made of plastic. Spraying water / foam is sufficient for fire fighting.
- Self-ignition temperature : Aluminium does not self ignite.
- Combustion products : Packing material and Spools can catch fire if exposed to fire.
- Decomposition products : Aluminium will melt at temperatures above 600deg C and will vaporize at temperatures above 1400 deg C. Packing material will burn and other products as hydrocarbons and CO2 may be formed.
- Recommended extinguishing media : water, foam
- First aid : In case of the inhalation of fumes of burning packing material, the affected person should be removed to fresh air as soon as possible and artificial respiration applied as necessary. Medical attention should be obtained immediately.
- Hazchem code : Not available

**6. Accidental Release Measures**

Do not keep spool with leftover wire on the floor, in order to avoid possible tripping of personnel on the floor.

**7. Handling and Storage:**

Individual spools weight does not exceed 12kgs and hence can be lifted by bare hands. However care should be taken to ensure that the wire is fixed to the edge holes so that it does not get un-wound. Packing boxes contain 3 Spools and may need assisted lifting. Pallets may weigh several hundred kilos and will need fork lifts. Pallets should always be lifted from bottom and should never be lifted by overhead cranes as this can crush and damage the spools. Store the spools in the original boxes provided and keep the boxes and the pallet in a dry and moderate environment, ambient temperature and humidity preferably 25°C, 50% relative humidity respectively. Do not stack pallets as stacking can damage the material.

**8. Exposure Controls / Personal Protection**

- During normal handling protective gloves and the use of usual protective equipment are recommended.
- Follow the safety procedures recommended by the Metalliser OEM while operating and handling the metalliser.

**9. Physical and Chemical Properties:**

- These are indicative values only and should not be regarded as product specification.
- General information : Appearance : Aluminium Wire wound on a spool  
Physical state at 20°C : solid. Colour : Silver Grey
- Important health, safety and environmental information : Melting range : beyond 600°C Auto ignition temperature : Not Applicable Solubility in water: insoluble

**10. Stability and Reactivity:**

The product is stable and non-reactive at normal handling and storage conditions.  
Hazardous reactions : None

**11. Toxicological Information:**

Non toxic. Compliant Under the European Regulation EC 1935/2004 which defines the Framework Regulation on materials and articles intended to come into contact with food.

**12. Ecological Information :**

When disposed of under orderly conditions, no environmental damage occurs. It does not contain additives based on heavy metals like lead, cadmium, mercury or chromium.

**13. Disposal Consideration :** Can be recycled or may be disposed of in accordance with local official regulations.

**14. Transport Information :** Not restricted for transportation in road, marine and air. Not classified as dangerous goods.

**15. Regulatory Information :** Not classified as dangerous substance.

**16. Other Information :** Statements are made as per the latest state of our knowledge. They describe our product with regard to safety requirements, they do not mean a guarantee for certain characteristics.

Global Client Base



Gat No. 146, Mahalunge, Chakan Industrial Area, Chakan Talegaon Road, Pune - 410501, India.  
CIN : U31908PN1988PTC047098 Tel : +91 9272212120 Email : info@electrolead.co.in  
[www.electrolead.co.in](http://www.electrolead.co.in)