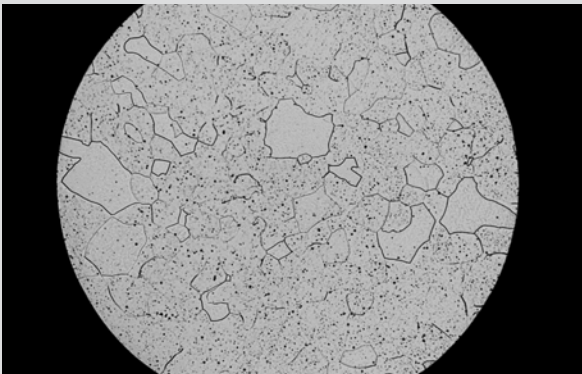


## AluBond Prime Wire

### Aluminum Bonding Wire for Extended Corrosion Resistance



#### Al-H14 CR Benefits

- Best corrosion resistance
- Comes in two versions: medium and soft
- Medium performance for high strength requirements
- Soft performance for extra sensible chip bonding and outstanding soft bonding properties
- Available in both, wire & ribbon shape

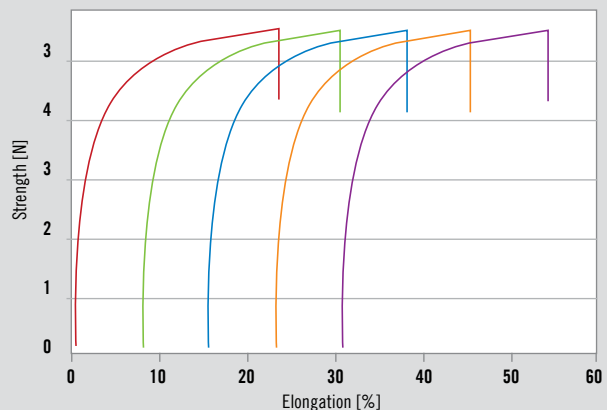
Al-H14 CR wires and ribbons consist of high purity aluminum with selected addition elements homogeneously distributed in defined concentrations. The corrosion resistant Al-H14 CR wire fulfils the increasing requirements made on the reliability of bonded connections in automobile and power electronics.

#### Areas of Application

- Automotive components
- Power components
- Hybrid components
- Transistors / thyristors

#### Serial Tensile Test Result from Soft AluBond Prime Wire

300 µm/12 mil



#### Recommended Technical Data of AluBond Prime Wire

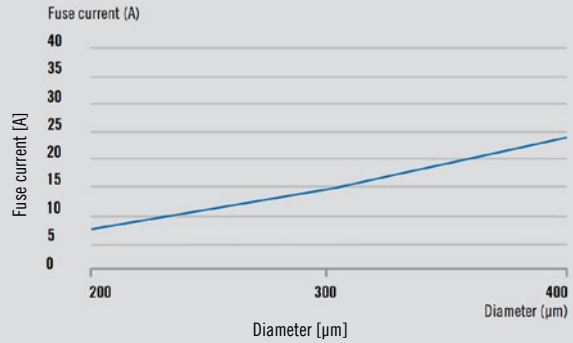
Diameter	Micron	125	200	250	300	380	400	500
	Mil	5	8	10	12	15	16	20
Medium	Elongation [%]	> 10	> 15	> 15	> 15	> 15	> 15	> 15
	Breaking Load [cN]	75–120	200–290	300–450	450–650	700–1050	750–1200	1150–1850
Soft	Elongation [%]		> 10	> 10	> 10	> 10	> 10	> 10
	Breaking Load [cN]		140–200	220–300	320–420	475–675	550–750	850–1150

For other diameters, please contact Heraeus Electronics Product Management

### Characteristics of AluBond Prime Wire

Melting Point	°C	660
Modulus of rigidity	kN / mm <sup>2</sup>	27
Thermal conductivity at 20°C	W / m·K	230
Linear expansion coefficient (20 – 30°C)	10 <sup>-6</sup> -K <sup>-1</sup>	25.3
Electrical Resistivity at 20°C	μΩm-cm	2.8
Temperature coefficient of electrical resistance (0 – 100°C)	10 <sup>-3</sup> -K <sup>-1</sup>	4.14
Relative electrical conductivity (IACS) at 20°C	%	64.0
Meter resistance at ø 25 μm (20°C)	Ω / m	57.1

### Fuse Current of AluBond Prime Wire



Loop length: 20 mm  
Ramp: 0.2 A/s



#### Americas

Phone +1 610 825 6050  
electronics.americas@heraeus.com

#### Asia Pacific

Phone +65 6571 7649  
electronics.apac@heraeus.com

#### China

Phone +86 53 5815 9601  
electronics.china@heraeus.com

#### Europe, Middle East and Africa

Phone +49 6181 35 4370  
electronics.emea@heraeus.com

The descriptions and engineering data shown here have been compiled by Heraeus using commonly-accepted procedures, in conjunction with modern testing equipment, and have been compiled as according to the latest factual knowledge in our possession. The information was up-to date on the date this document was printed (latest versions can always be supplied upon request). Although the data is considered accurate, we cannot guarantee accuracy, the results obtained from its use, or any patent infringement resulting from its use (unless this is contractually and explicitly agreed in writing, in advance). The data is supplied on the condition that the user shall conduct tests to determine materials suitability for particular application. The Heraeus logo, Heraeus, Condura®, DTS®, Die Top System® and the Condura, DTS, Die Top System figurative mark are trademarks or registered trademarks of Heraeus Holding GmbH or its affiliates. All rights reserved.

Heraeus Electronics GmbH & Co.KG, 63450 Hanau, Germany  
Web: www.heraeus-electronics.com