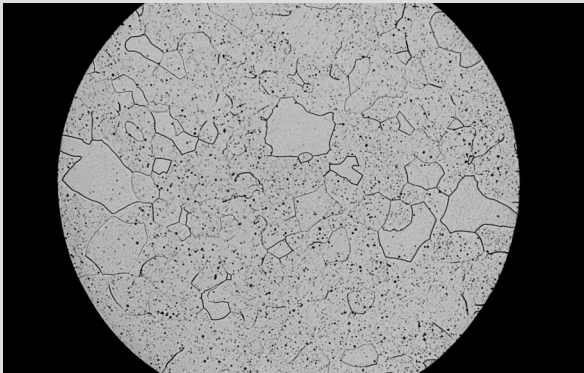


## AluBond Prime H14CR

### Aluminum Bonding Wire for Extended Corrosion Resistance



#### AluBond Prime H14CR Benefits

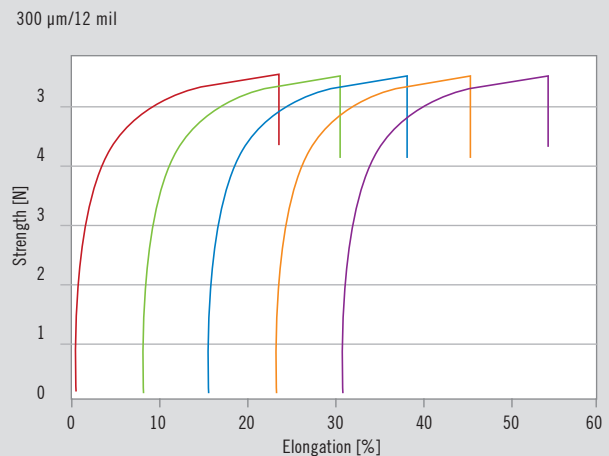
- Best corrosion resistance
- Comes in two versions: medium and soft
- Medium performance for high strength requirements
- Soft performance for extra sensible chip bonding and outstanding soft bonding properties
- Available in both, wire and ribbon shape

AluBond Prime H14CR wires and ribbons consist of high purity aluminum with selected addition elements homogeneously distributed in defined concentrations. The corrosion resistant AluBond Prime H14CR 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 H14CR



#### Recommended Technical Data of AluBond Prime H14CR

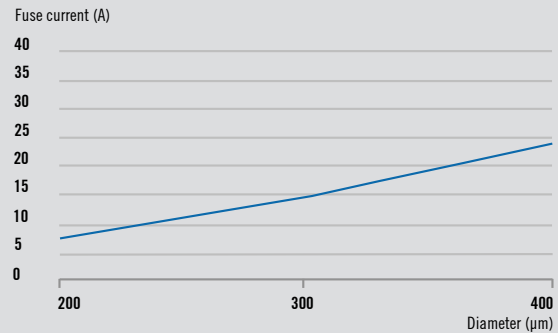
Diameter	Micron	125	200	250	300	380	400	500
	Mil	5	8	10	12	15	16	20
Medium	Elongation [%]	> 10	> 15	> 15	> 15	> 15	> 15	> 15
	Breaking Load [cN]	75–120	200–290	300–450	450–650	700–1050	750–1200	1150–1850
Soft	Elongation [%]		> 10	> 10	> 10	> 10	> 10	> 10
	Breaking Load [cN]		140–200	220–300	320–420	475–675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

For other diameters, please contact Heraeus Electronics Product Management

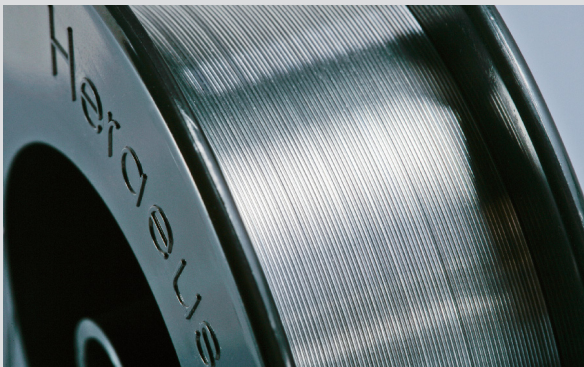
## Characteristics of AluBond Prime H14CR

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

## Fuse Current of AluBond Prime H14CR



Loop length : 20 mm  
Ramp : 0.2 A/s



**Heraeus Electronics**  
Heraeus Deutschland GmbH & Co. KG  
Heraeusstraße 12-14  
63450 Hanau, Germany  
www.heraeus-electronics.com

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

**Asia Pacific**  
Phone +65 6571 7677  
electronics.apac@heraeus.com

**China**  
Phone +86 21 3357 5457  
electronics.china@heraeus.com

**Europe, Middle East and Africa**  
Phone +49 6181 35 3069  
+49 6181 35 3627  
electronics.emea@heraeus.com