

Technical Data Sheet

BONDING WIRE

Product Type: Copper Wires

Product Name: CucorAl PLUS

Technical Parameters (*)

Dimension (micron / mil)	Diameter Tolerance (μm)	Ratio Al/Cu (vol. %)	Elongation (%)	Breaking Load (cN)	Diameter / thickness (μm)		
					Copper core	Target Al shell	Min. Al shell
150 / 6	± 5	50/50 (± 6)	> 10	170 – 350	~106	~22	>16
200 / 8	± 5	50/50 (± 6)	> 15	250 – 370	~141	~29	>20
300 / 12	± 6	50/50 (± 6)	> 15	1000 – 1400	~212	~44	>32
380 / 15	± 7	50/50 (± 6)	> 15	1700 – 2500	~266	~57	>40
400 / 16	± 8	50/50 (± 6)	> 15	1800 – 2600	~284	~58	>42
500 / 20	± 8	50/50 (± 6)	> 15	2800 – 4000	~354	~73	>55

1mil \approx 25micron

100cN \approx 100g

Breaking load and elongation: Testing velocity 10 mm / min, Test length of sample: 100 mm
AlCu ratio is confirmed by cross section for every batch.

(*) Technical parameters: The above parameters are standard values. Customized specification and intermediate dimensions possible after clarification with Heraeus technical experts.

Material Characteristics

Chemical Properties

Al: Shell	Base material of 99.99%
Total content of additive elements:	100 ppm
Total content of single additive element:	60 ppm
Cu: Core	Base material of 99.99%
Total content of additive elements:	Max 100 ppm
Total content of single additive element:	60 ppm

Markings

Each single packed unit gets marked with a label carrying the following information:

- Wire type
- Specified diameter
- Length per spool
- Specified elongation
- Specified breaking load
- Lot no.
- Original sealed package
- Supplier name
- Description of wire start (tape colour)
- Barcode (code 39) for adequate parameters

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Packing

Spools are single packed and arrested in a suitable, dust-safe polymer box, preventing ribbon and spool from damages and pollution.

Expiry Date and Recommendation Storage Conditions

Cucoral Plus can be stored for min. 12 month, when it is original sealed, packed and atmospheric conditions can be kept.

Environmental temperature: 10 – 40 °C

Relative humidity: < 70 %

In case that the atmospheric conditions cannot be held stable, we recommend storing the wires in a nitrogen flooded chamber. Storage of the wires must be done in original supplied plastic boxes in upright position. Storing surrounding must keep the wire spools safe from mechanical impact of any case, such as shocks, vibration, etc., and away from direct sunlight or rain.

6-month period is depending on the manufacturing date, which can be find on the accompanying certificate which is supplied with every shipment and on each spool package label.

After opening the sealed box, we recommend consuming the wire within 7 days.

Certificate of Quality

A Certificate of Quality gets supplied enclosed to each lot, providing the following information at minimum:

- Product identification (name, material, lot no., order no., customer name, mfg. & exp. date)
- Specification / tolerances / spool data
- Quality inspection test data / results

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

China
Phone +86 21 3357 5156
electronics.china@heraeus.com

Japan
Phone +81 (3) 6902 6585
electronics.japan@heraeus.com

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

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