

# AERONAUTICAL MATERIAL SPECIFICATION

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AMS 4184

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Revised

## ALUMINUM ALLOY BRAZING WIRE 10Si - 4Cu (716)

1. **ACKNOWLEDGMENT:** A vendor shall mention this specification number in all quotations and when acknowledging purchase orders.

2. **FORM:** Round, rectangular, and flat wire.

3. **COMPOSITION:**

Silicon	9.30 - 10.70
Copper	3.30 - 4.70
Iron	0.80 max
Zinc	0.20 max
Chromium	0.15 max
Manganese	0.15 max
Magnesium	0.15 max
Other Impurities, each	0.05 max
Other Impurities, total	0.15 max
Aluminum	remainder

4. **CONDITION:** Annealed, unless otherwise specified.

5. **PROPERTIES:**

Melting Range	970-1085 F
Flow Point	1095 F max

6. **QUALITY:** Wire shall be uniform in quality and condition, clean, sound, smooth, and free from foreign materials and from internal and external defects detrimental to its use for brazing purposes.

7. **STANDARD SIZES:**

7.1 **Round Wire:** 1/16, 3/32, 1/8 and 3/16 in. diameters.

7.2 **Flattened and Slit Wire:** 0.020 X 2 in. cross-section.

8. **TOLERANCES:**

8.1 **Round Wire:** Plus and minus 0.001 in. on diameters 0.064 in. and less; plus and minus 0.0015 in. on diameters over 0.064 to 0.500 in., incl.

8.2 **Flattened and Slit Wire:** Plus and minus 0.001 in. on thickness; plus and minus 0.006 in. on width.

9. **REPORTS:** Unless otherwise specified, the vendor of wire shall furnish with each shipment three copies of a notarized report showing the results of tests for chemical composition of the wire in the shipment, or stating that the chemical composition of the wire conforms to the requirements specified. This report shall include the purchase order number, material specification number, size, and quantity.