

AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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Revised

ALUMINUM ALLOY BRAZING WIRE 12Si (718)

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	11.0 - 13.0
Iron	0.80 max
Copper	0.30 max
Zinc	0.20 max
Manganese	0.15 max
Magnesium	0.10 max
Other Impurities, each	0.05 max
Other Impurities, total	0.15 max
Aluminum	remainder

4. CONDITION: Annealed, unless otherwise specified.

5. TECHNICAL REQUIREMENTS:

5.1 Melting Range: 1065 - 1085 F

5.2 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 inch diameters.

7.2 Flattened and Slit Wire: 0.020 x 2 inch cross-section.

8. TOLERANCES:

8.1 Round Wire: Plus and Minus 0.001 inch for diameters 0.064 inch and under; plus and minus 0.0015 inch for diameters over 0.064 to 0.500 inch, inclusive.

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

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