

AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
29 West 39th Street
New York City

AMS 4185

Issued 6-1-51

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.

Section 7C of the SAE Technical Board rules provides that: "All technical reports, including standards approved and practices recommended, are advisory only. Their use by anyone engaged in industry or trade is entirely voluntary. There is no agreement to adhere to any SAE standard or recommended practice, and no commitment to inform to or be guided by any technical report. In formulating and approving technical reports, the Board and its Committees will not investigate or consider any matter which may apply to the subject matter. Prospective users of the report are responsible for protecting themselves against liability for infringement of patents."