

AERONAUTICAL MATERIAL SPECIFICATIONS

AMS 4185A

SOCIETY OF AUTOMOTIVE ENGINEERS, Inc. 485 Lexington Ave., New York 17. N.Y.

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BRAZING ALLOY, ALUMINUM 12S1 (4047)

1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
- ∅ 2. FORM: Wire, sheet, pig, granular, shot, chips, or as ordered.
3. APPLICATION: Primarily for joining of aluminum by brazing.
4. COMPOSITION:

Silicon	11.0 - 13.0
Iron	0.8 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

5. CONDITION: Unless otherwise specified, material shall be furnished in the following condition:
 - ∅ 5.1 Round, and Flattened and Slit Wire: Annealed.
 - ∅ 5.2 Sheet: Annealed.
 - ∅ 5.3 Pig, Granular, Shot, and Chips: As fabricated.
6. TECHNICAL REQUIREMENTS:
 - 6.1 Solidus: When determined, shall be 1065 - 1085 F.
 - 6.2 Liquidus: When determined, shall be not higher than 1095 F.
7. QUALITY: Material shall be uniform in quality and condition, clean, sound, smooth, and free from foreign materials and from internal and external imperfections detrimental to use for brazing purposes.
8. STANDARD SIZES:
 - ∅ 8.1 Round Wire: 1/32, 1/16, 3/32, 1/8, 3/16, and 1/4 in. diameters.
 - 8.2 Flattened and Slit Wire: 0.020 x 2 in. cross-section.

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