

AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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Revised

BRAZING ALLOY

54Ag - 40Cu - 5Zn - 1Ni

1. **ACKNOWLEDGMENT:** A vendor shall mention this specification number in all quotations and when acknowledging purchase orders.
2. **FORM:** Wire, strip, pig, granular, or as ordered.
3. **APPLICATION:** For joining nonferrous metals, except those having base of aluminum or magnesium, or ferrous metals, particularly austenitic steels and alloys, where high joint strength up to 800 F is required.
4. **COMPOSITION:**

Silver	53.00 - 55.00
Copper	39.00 - 41.00
Zinc	4.00 - 6.00
Nickel	0.50 - 1.50
Total Impurities	0.15 max
5. **CONDITION:** Unless otherwise specified, material shall be furnished in the following condition:
 - 5.1 **Wire:** Cold drawn, annealed and pickled bright.
 - 5.2 **Strip:** Cold rolled hard.
 - 5.3 **Pig and Granular:** As fabricated.
6. **TECHNICAL REQUIREMENTS:**
 - 6.1 **Melting Point:** Shall be not lower than 1325 F.
 - 6.2 **Flow Point:** Shall be not higher than 1575 F.
 - 6.3 **Color:** Shall be yellow-white.
 - 6.4 **Bending:** Wire and strip 0.25 in. and less in diameter or thickness, after being heated at approximately 1000 F in open atmosphere for 20 minutes and air cooled, shall withstand, without cracking, bending at room temperature through an angle of 180 degrees around a diameter equal to four times the diameter or thickness of specimen in plane of bend.
7. **QUALITY:** Material shall be uniform in color, quality and condition, and free from foreign materials and from defects detrimental to its working qualities. Wire and strip shall be clean, sound, smooth and bright, and free from slivers, splitting, ragged edges, damaged ends and other injurious defects.
8. **SIZES AND TOLERANCES:** Unless otherwise specified, round wire shall be supplied in commercially standard sizes of 1/32-in., 1/16-in. and 3/32-in. diameter, as ordered. Diameter may vary plus and minus 5% from that ordered.

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