

# AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.  
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AMS 4710B

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## BRASS WIRE, TINNED Annealed

1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
2. APPLICATION: Primarily for safety wire.
3. COMPOSITION:
  - 3.1 Basis Brass Wire:

Copper	63.0 - 68.5
Lead	0.10 max
Iron	0.05 max
Zinc	remainder
  - 3.2 Coating: The basis brass wire shall be uniformly coated with pure tin.
4. CONDITION: Cold drawn or rolled and annealed.
5. TECHNICAL REQUIREMENTS:
  - 5.1 Grain Size: Average grain size shall be 0.035 - 0.070 mm as determined, on a longitudinal section, by ASTM E79-49T.
  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 fabrication or to performance of parts.
  7. TOLERANCES: Unless otherwise specified, tolerances shall conform to the latest issue of AMS 2224 as applicable. Diameter, thickness and width tolerances shall be as specified below:
    - 7.1 Rounds: Table I.
    - 7.2 Hexagons and Octagons: Table II, Non-refractory.
    - 7.3 Squares: Table III, Non-refractory.
    - 7.4 Rectangles, Thickness: Table III, Non-refractory.
    - 7.5 Rectangles, Width: Table IV, Non-refractory.
8. REPORTS:
  - 8.1 Unless otherwise specified, the vendor of wire shall furnish with each shipment three copies of a report showing the results of tests to determine conformance to the requirements of this specification or stating that the chemical composition and grain size of the wire conform to the requirements specified. This report shall include the purchase order number, material specification number, size, and quantity.

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