



# AEROSPACE MATERIAL SPECIFICATIONS

## AMS 4767A

SOCIETY OF AUTOMOTIVE ENGINEERS, Inc.

485 Lexington Ave., New York, N. Y. 10017

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### BRAZING ALLOY, SILVER 92.5Ag - 7.2Cu - 0.22Li

1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
- ∅ 2. FORM: Wire, rod, strip, sheet, pig, shot, chips, or as ordered.
3. APPLICATION: Primarily for brazing corrosion resistant honeycomb structures where service temperature will not exceed 900 F (482 C). Oxidation of the brazed alloy may occur during long time service at such temperatures.

4. COMPOSITION:

		min	max
∅	Silver	92.0	93.0
	Copper	6.6	7.8
	Lithium	0.15	0.30
	Other Elements, total	--	0.15

Note. The following approximate values are listed for reference

Solidus	1435 F (779 C)
Liquidus	1635 F (891 C)

- ∅ 5. CONDITION: Unless otherwise specified, material shall be furnished in the following condition.
  - ∅ 5.1 Wire and Rod: Cold drawn or rolled or extruded, as ordered, annealed, and pickled clean.
  - ∅ 5.2 Strip and Sheet: Cold rolled hard.
  - ∅ 5.3 Pig, Shot, and Chips: As fabricated.
6. TECHNICAL REQUIREMENTS:
  - 6.1 Color: Shall be a silvery metallic luster.
  - 6.2 Flatness: When unrolled, strip shall lie flat with no undue tendency to recoil.
7. QUALITY: Material shall be uniform in color, quality, and condition, and free from foreign materials and from imperfections detrimental to its working qualities. Wire, rod, strip, and sheet shall be clean, sound, smooth, bright, and free from slivers, splitting, ragged edges, damaged ends, and other injurious imperfections.
8. SIZES AND TOLERANCES: Unless otherwise specified, material shall be supplied in the following
  - ∅ standard sizes and to the tolerances shown:
    - ∅ 8.1 Wire and Rod; Drawn, Rolled, or Extruded:
      - 8.1.1 Nominal Diameters, Inch: 0.005, 0.007, 0.010, 0.015, 0.025, 1/32, 0.040, 3/64, 1/16, 3/32, 1/8, 0.175, 3/16, 0.225, 1/4.

SAE Technical Board rules provide 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 conform to or be guided by any technical report, in formulating and approving technical reports, the Board and its Committees will not investigate or consider patents which may apply to the subject matter. Prospective users of the report are responsible for protecting themselves against infringement of patents."

8.1.2 Diameter Tolerance; Drawn Wire and Rod: The latest issue of AMS 2224, Table II, column headed  $\emptyset$  "Refractory".

8.1.3 Diameter Tolerance; Rolled or Extruded Wire and Rod:

	Nominal Diameter or Distance Between Parallel Sides Inch	Tolerance, Inch	
		<u>Plus</u>	<u>Minus</u>
$\emptyset$	1/32 to 1/16, incl	0.005	--
	Over 1/16 to 1/8, incl	0.006	--
	Over 1/8 to 3/16, incl	0.007	0.009
	Over 3/16 to 1/4, incl	0.008	0.010

$\emptyset$  8.2 Strip and Sheet:

8.2.1 Nominal Thickness, Inch: 0.001, 0.0015, 0.002, 0.003, 0.004, 0.005, 0.006, 0.008, 0.010, 0.014,  $\emptyset$  0.020, and 0.030.

8.2.2 Tolerances: Unless otherwise specified, thicknesses less than 0.002 in. shall have a tolerance of  $\pm 0.0002$  in; thicknesses 0.002 in. and over shall have tolerances conforming to the latest issue of  $\emptyset$  AMS 2222 for Refractory Alloys. Width of individual rolls of strip shall not vary more than  $\pm 0.010$  in. from nominal. The length of strip in a roll shall be as determined by the manufacturer, except that no roll shall weigh more than 75 pounds.

9. REPORTS:

9.1 Unless otherwise specified, the vendor of the product shall furnish with each shipment three copies of a report stating that the product conforms to the requirements specified. This report shall include the purchase order number, material specification number, heat number, form and size, and quantity from each heat.

9.2 When parts made of this brazing alloy or assemblies requiring use of this brazing alloy are supplied, the vendor of finished or semi-finished parts shall, unless otherwise specified, furnish with each shipment three copies of a report showing the purchase order number, material specification number, contractor or other direct supplier of brazing alloy, part number, and quantity. When brazing alloy for making parts is produced or purchased by the parts vendor, that vendor shall inspect each lot of brazing alloy to determine conformance to the requirements of this specification, and shall include in the report a statement that the brazing alloy conforms, or shall include copies of laboratory reports showing the results of tests to determine conformance.

10. IDENTIFICATION:

10.1 Material shall be identified as agreed upon by purchaser and vendor.

10.2 Each package shall be permanently and legibly marked to give the following information:

BRAZING ALLOY, SILVER-COPPER-LITHIUM  
AMS 4767A  
HEAT OR IDENTIFICATION NUMBER \_\_\_\_\_  
MANUFACTURER'S IDENTIFICATION \_\_\_\_\_  
MANUFACTURER \_\_\_\_\_  
NOMINAL DIMENSIONS \_\_\_\_\_  
WEIGHT, TROY OZ \_\_\_\_\_

11. PACKAGING: Material shall be suitably wrapped, sealed, and boxed or otherwise packaged for protection  $\emptyset$  against injury and contamination during shipment and under normal dry storage conditions.