AEROSPACE
MATERIAL SPECIFICATIONS

SOCIETY OF AUTOMOTIVE ENGINEERS, Inc. 485 Lexington Ave., New York, N.Y. 10017

AMS 4766B

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BRAZING ALLOY, SILVER
85Ag - 15Mn

1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.

Ø 2. FORM: Wire, rod, strip, sheet, pig, powder, shot, chips, or as ordered.

3. APPLICATION: Primarily for joining ferrous metals, where high strength up to approximately 800 F (427 C) for short time service or 500 F (260 C) for long time service is required, or for non-ferrous metals except those having base of aluminum or magnesium.

4. COMPOSITION:

	min	max
Silver	84.0	86.0
Manganese	14.0	16.0
Other Elements, total	—	0.15

Note. The following approximate values are listed for reference:

Solidus	1760 F (960 C)
Liquidus	1780 F (971 C)

5. CONDITION: Unless otherwise specified, material shall be furnished in the following condition:

Ø 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.

Ø 5.3 Pig, Powder, Shot, and Chips: As fabricated.

6. TECHNICAL REQUIREMENTS:

6.1 Color: Shall be white.

Ø 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 Ø standard sizes and to the tolerances shown:

Ø 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, Ø 1/8, 0.175, 3/16, 0.225, 1/4.

8.1.2 Diameter Tolerance; Drawn Wire and Rod: The latest issue of AMS 2224, Table II, Column headed ø "Refractory".

8.1.3 Diameter Tolerance; Rolled or Extruded Wire and Rod:

Nominal Diameter or Distance Between Parallel Sides Inch	Tolerance, Inch Plus and Minus Round	Square
1/32 to 1/16, incl	0.005	--
ø 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

8.2 Strip and Sheet:

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

8.2.2 Tolerances: ø Unless otherwise specified, thicknesses less than 0.002 in. shall have a tolerance of ± 0.0002 in.; thicknesses 0.002 in. and over shall have tolerances conforming to the latest issue of AMS 2222 for Refractory Alloys. Width of individual rolls of strip shall not vary more than ± 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.

ø 8.3 Powder:

ø 8.3.1 Nominal Sizes: -60, -100, -200, and -325 mesh.

8.3.2 Unless otherwise agreed upon by purchaser and vendor, the nominal mesh sizes shown in 8.3.1 shall be supplied in accordance with the following tolerances on particle size distribution.

Nominal Mesh Size	100% Through U. S. Sieve Series Number	No More Than 10% Through U. S. Sieve Series Number
ø - 60	60	100
-100	100	200
-200	200	325
-325	325	*

*No more than 10% finer than a 10 micron particle size.

9. REPORTS:

9.1 ø 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 the 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.