

AEROSPACE

AMS 4395A

MATERIAL SPECIFICATIONS

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

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MAGNESIUM WIRE, WELDING 9Al - 2Zn (AZ92A)

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 use as filler metal for inert gas arc welding of magnesium alloys of similar composition, particularly where consistently high quality joints are mandatory.
3. COMPOSITION:

Aluminum	8.3 - 9.7
Zinc	1.7 - 2.3
Manganese	0.15 min
Silicon	0.05 max
Copper	0.05 max
Nickel	0.005 max
Iron	0.005 max
Other Impurities, total	0.30 max
Magnesium	remainder

4. CONDITION:

- 4.1 Unless otherwise specified, wire for cut lengths shall be extruded; for spooled wire, shall be extruded and sized. Wire shall be furnished on disposable spools for machine welding and in cut lengths for manual welding operations, as ordered.
- 4.2 Extruding compounds, oxides, and dirt shall be removed.

5. TECHNICAL REQUIREMENTS:

- 5.1 Welding: Melted wire shall flow smoothly and evenly during welding and shall be capable of producing acceptable welds.
- 5.2 Spooled Wire: Shall conform to the following unless otherwise agreed upon by purchaser and vendor.
 - 5.2.1 Layer Winding: Wire shall be closely wound in layers but adjacent turns within a layer need not necessarily be touching; shall be wound so as to avoid producing kinks, waves, and sharp bends; and shall be free to unwind without restriction caused by overlapping or wedging. The outside end of the spooled wire shall be so treated that it may be readily located.
 - 5.2.2 Wire on each spool shall be in one continuous length.