

AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS4006

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ALUMINUM ALLOY SHEET & STRIP

Manganese (3S-0)

1. **ACKNOWLEDGMENT:** A vendor must mention this specification number in all quotations and when acknowledging purchase orders.

2. **COMPOSITION:**

Manganese	1.0 - 1.5
Copper	0.2 max
Aluminum	97.0 min

3. **CONDITION:** (a) Fully annealed.

(b) Test specimens shall conform to the following requirements:

<u>Thickness</u>	<u>Tensile Strength (max) Lbs. Per Sq.In.</u>	<u>Elongation % In 2 inches (min)</u>
Less than .013	19,000	18
.013 - .031	19,000	20
.032 - .050	19,000	23
.051 - .249	19,000	25

(c) The material shall not crack when cold bent flat on itself with the axis of the bend parallel to the direction of rolling.

(d) Unless otherwise ordered, sheet shall have a bright finish and strip shall have a mill finish.

4. **QUALITY:** The material shall be uniform in quality and temper, straight, flat, clean and smooth, free from seams, laminations, blisters and other defects within the limits of best commercial manufacturing methods. Material revealing defects during fabrication is subject to rejection.

5. **TOLERANCE:** The following variations in thickness are permissible:

<u>Thickness (inch)</u>	<u>Tolerance in inches or percent of thickness</u>		
	<u>(%T) Plus or Minus</u>		
	<u>Widths up to 36 in., incl.</u>	<u>Width over 36 in., to 54 in., incl.</u>	<u>Width over 54 in., to 72 in., incl.</u>
0.250 to 0.129	4%T	5%T	6%T
0.128 to 0.092	0.0045	0.005	0.007
0.091 to 0.073	.003	.004	.006
0.072 to 0.051	.003	.004	.005
0.050 to 0.037	.0025	.003	.004
0.036 to 0.018	.002	.0025	---
0.017 to 0.010	.0015	.002	---