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AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.

29 West 39th Street

New York City

AMS

3232

GASKETS, OIL RESISTING High Temperature

1. **ACKNOWLEDGMENT:** A vendor must mention this specification number and its last revision in all quotations and when acknowledging purchase orders.
2. **CONSTRUCTION:** This gasket material shall be made from selected long fibre asbestos and special heat resisting compounds which are bonded and felted together under pressure into a sheet that is pliable and resilient.
3. **CONDITION:** The material as supplied shall have a minimum tensile strength of 2000 lb per sq in. across the direction of rolling. If the strength cannot be determined in this direction because of the shape of the parts, the tensile strength of the material parallel to the direction of rolling shall be 4000 lb per sq in.
4. **QUALITY:**
 - (a) Gaskets shall be free from defects in material and workmanship and shall not deteriorate with age.
 - (b) Gaskets shall not cause corrosion of aluminum, magnesium, steel and copper alloys.
 - (c) Gaskets shall show sufficient compressibility to seal joints against leaks.
 - (d) Gaskets shall permit free removal from an assembly without delamination as a result of excessive sticking.
5. **TESTS:**
 - (a) **Gasoline Immersion:**— After soaking in straight run aviation grade gasoline at room temperature for 5 hours the temporary increase in thickness, measured immediately after removal from the gasoline, shall be not more than 15%.

There shall be no disintegration or permanent swelling.
 - (b) **Oil Immersion:**— After soaking in a paraffin base lubricating oil (viscosity 120 at 210°F) at 300°F for 5 hours the average tensile strength shall be between 90% and 105% of the actual values obtained from untreated specimens.

The binder shall not be tacky.
 - (c) **Aging:**— After heating in air at 200°F for 15 hours the test pieces shall withstand bending 180° in each direction over a radius equal to six times the thickness when stock is 1/16 inch or less thick, and a radius equal to eight times the thickness when stock is over 1/16 inch thick, without cracking.
6. **TOLERANCES:** Permissible variations in thickness of the sheets or gaskets shall be as follows. All dimensions are in inches:

<u>Nominal thickness</u>	<u>Tolerance</u>
1/64 and less	+ 0.005 - 0.002
Over 1/64 to 1/16	± 0.005
1/16 and over	+ 0.008 -