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AMS
3230

G A S K E T, O I L R E S I S T I N G

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 rubber and/or synthetic rubber compounds which are bonded and felted together under pressure into a sheet that is pliable and resilient.
3. **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.
4. **TESTS:** (a) **As Received:-** The material as supplied shall have a minimum tensile strength of 2000 lb per sq in across the direction of rolling, when the rate of jaw separation is 12 in per min. 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 5000 lb per sq in, when tested at the same speed.

(b) **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 40%. There shall be no distintegration or permanent swelling.

(c) **Oil Immersion:-** After soaking in a non-compounded Pennsylvania lubricating oil (viscosity 120 at 210°F) at 250°F for 5 hours, the minimum tensile strength, measured in the same direction as before treatment and at the same speed, shall be as follows:

<u>Nominal Thickness - inches</u>	<u>Lengthwise</u>	<u>Across</u>
1/16	2500	1500
1/32	2000	1000
1/64	1500	500

The material shall not increase in thickness more than 40% and the binder shall not be tacky.

(d) **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.

(e) **Note:-** When gaskets are too small to yield tensile specimens, they must be comparable in all other respects with approved gaskets, from the same manufacturer, on which tensile tests have been made.

5. 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	+ 0.003

6. APPROVAL: A manufacturer shall not begin to supply material to this specification until samples are approved by the purchaser and after approval the constituents and methods of manufacture shall not be changed without permission from the purchaser. Results of tests on incoming shipments shall be as good or better than those on approved samples.
7. REJECTIONS: Material not conforming to this specification, or modifications specified on the drawing or the purchase order, is subject to rejection. If samples for verification are desired by the vendor, they must be claimed within three weeks. Rejected material or parts will be held a reasonable time, at the vendor's risk, awaiting shipping instructions for the return of same for credit or replacement, as specified. Vendor shall pay all transportation charges.