AEROSPACE
MATERIAL SPECIFICATIONS

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

AMS 3839

Issued 9-1-65
Revised

FABRIC, WIRE REINFORCED ASBESTOS
Polytetrafluoroethylene Impregnated, Sintered

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

2. FORM: Woven sheet or strip, and braided tubing or strip.

3. APPLICATION: Primarily as an anti-chafing cushion between metal tubes and tube clips operating at temperature up to 500 F (260 C).

4. MATERIAL AND FABRICATION: Material shall be made from selected long fiber Grade A or better (Ref. ASTM D299) chrysotile asbestos woven or braided into the desired form, with each thread in the fabric being reinforced with brass, copper, or corrosion resistant steel wire and the fabric being impregnated with polytetrafluoroethylene resin and sintered by heating.

5. TECHNICAL REQUIREMENTS:

5.1 General:

5.1.1 Color: Shall be white to dark brown.

5.1.2 Corrosion: The product shall not have a corrosive effect on other materials when exposed to conditions normally encountered in service. Discoloration of metal shall not be considered objectionable.

5.2 Properties: The product shall conform to the following requirements; tests shall be performed on the product supplied and in accordance with the methods listed. When ASTM methods are specified for determining conformance to the following requirements, tests shall be conducted in accordance with the issue of the ASTM method listed in the latest issue of AMS 2350.

5.2.1 Specific Gravity, 73.4/73.4 F (23/23 C)	1.80 - 2.25	ASTM D792, Method A
5.2.2 Compressibility, %	12 - 25	ASTM F36, Procedure A
5.2.2.1 Recovery, %, min	15	
5.2.3 Weight Loss at 600 F (315.6 C) based on original dry weight, %, max	5	See Note 1
5.2.4 Weight Loss at 900 F (482.2 C) based on original dry weight, %	20 - 65	See Note 1

Note 1. Place a 2 g sample in a crucible and heat at 220 F ± 2 (104.4 C ± 1.1) to constant weight (original dry weight) at room temperature. Heat at 600 F ± 10 (315.6 C ± 5.6) for 24 hr, cool, and weigh. Heat the same sample at 900 F ± 25 (482.2 C ± 14) for 3 hr, cool, weigh, and calculate weight losses occurring during the 600 F (315.6 C) and 900 F (482.2 C) heatings.