



POLYTETRAFLUOROETHYLENE (PTFE) FILM, EXPANDED, FUEL/ALCOHOL RESISTANT

WSL-M99D64-A

1. SCOPE

This specification defines a thermoplastic, expanded film based on polytetrafluoroethylene with good resistance to fuel/alcohol blends and good flex fatigue resistance.

2. APPLICATION

This specification was released originally for a fuel fill anti-expulsion device.

3. REQUIREMENTS

3.0 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

Material suppliers and part producers must conform to the Company's Standard Requirements For Production Materials (WSS-M99P1111-A).

3.4 PHYSICAL PROPERTIES

3.4.1 Density (Dimensional Method) 0.947 +/- 3 g/cm³

	WMD	AMD
3.4.2 Tensile Strength, MPa, min (ISO 37/ASTM D 412, Die C)	6.5	35
Elongation, %, min	500	10
3.4.3 Tear Strength, kN/m, min (ISO 34, Method B/ ASTM D 624, Die C)	45	60

3.5 IMMERSION IN AUTOOXIDIZED FUEL PN180 (ISO 1817/ASTM D 471, 168 h at 40 +/- 1 °C)

3.5.1 Tensile Strength Change, max	+35%
3.5.2 Elongation Change, max	+35%
3.5.3 Volume Change, max	-5%
3.5.4 Volume Change After Dry Out, max (22 h at 70 °C)	-10%

Date	Action	Revisions
2006 12 19	Revised	Inserted 3.0; Deleted 3.1, 3.2, 3.3, 3.8 & 4
1995 02 07	Activated	



Documents

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**3.6 IMMERSION IN 75% FUEL C and 25% METHANOL**

(ISO 1817/ASTM D 471,
168 h at 40 +/- 1 °C)

3.6.1 Tensile Strength Change, max +15%

3.6.2 Elongation Change, max +10%

3.6.3 Volume Change, max -5%

3.6.4 Volume Change After Dry Out, max -10%

3.7 HEAT AGED

(ISO 188/ASTM D 573, 150 +/- 50
Air Changes/h, 1000 h at 150 +/- 2 °C)

3.7.1 Tensile Strength Change, max -40%

3.7.2 Elongation Change, max +10%

5. GENERAL INFORMATION

The information given below is provided for clarification and assistance in meeting the requirements of this specification.

5.1 RECYCLING CODE

>PTFE<