

**THERMOPLASTIC ELASTOMER (TES) STYRENE BLOCK
COPOLYMER, 40 DUROMETER D HARDNESS, EXTERIOR****WSS-M2D505-A****1. SCOPE**

The material defined by this specification is a thermoplastic elastomer styrene block copolymer.

2. APPLICATION

This specification was released originally for material used as a wheel arch liner seal.

3. REQUIREMENTS

Material specification requirements are to be used for initial qualification of materials.

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 MOLDED TEST SPECIMENS**3.4.1 Preparation of Test Specimens**

Unless otherwise specified, all test shall be conducted on specimens die cut from injection molded plaques 150 x 150 x 2.0 +/- 0.2 mm. The plaques shall be molded according to ISO 294 and film gated along the upper 100 mm edge. No annealing allowed, unless specified otherwise.

3.4.2 Density, g/cm³ 1.10 +/- 0.05
(ISO 1183, Method A)

3.4.3 Hardness, Durometer D 40 +/- 5
(ISO 868, instantaneous,
plied-up specimen. Hand held
durometers shall not be used)

3.4.4 Tensile Strength, min Parallel 14.0 MPa
(ISO R 527, type 2, to Flow
500 mm/minute test speed) Across Flow 14.0 MPa

3.4.5 Elongation at Break, min Parallel 35%
(Test acc. to para 3.4.4) to Flow
Across Flow 35%

3.4.6 Modulus at 100% Elongation, min Parallel 13.5 MPa
(Test acc. to para 3.4.4) to Flow
Across Flow 13.5 MPa

Date	Action	Revisions
2004 10 22	Revised	Inserted 3.0; Deleted 3.1, 3.2, 3.3, 3.8, 3.9 & 4
2001 12 14	Activated	





3.4.7	Tear Strength, min (ISO 34, Method B, Procedure A)	Parallel to Flow Across Flow	70 kN/m 70 kN/m
3.4.8	Compression Set, max (ISO 815, Large Type-plyed specimen)		33%
3.4.9	Brittleness Point, max (ISO 812, Type B specimen)		-40 °C
3.4.10	Ozone Resistance, max (FLTM BP 101-01, Procedure A, tensile specimen, at 20% elongation)		Rating 0

3.5 HEAT AGEING

(ISO 188, 150 +/- 50 air
changes/h, 1000 h at 125 +/- 2 °C)

Hardness Change, max	+/- 5
Tensile Strength Change, % max	+90
Elongation Change, % max	+50

3.7 FLAMMABILITY

(ISO 3795)

Burn Rate, max	100 mm/minute
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The specimen size required for material approval is 355 x 100 x 2.0 +/- 0.1 mm with a smooth surface.

5. GENERAL INFORMATION

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

5.1 RECYCLING INFORMATION

>TES<