THERMOPLASTIC ELASTOMER (TPS) STYRENE BLOCK COPOLYMER, 70 DUROMETER A HARDNESS, INTERIOR — **WSS-M2D507-B4**

THERMOPLASTIC ELASTOMER (TPS) STYRENE BLOCK COPOLYMER, 80 DUROMETER A HARDNESS, INTERIOR — **WSS-M2D507-B5**

1. SCOPE

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

2. APPLICATION

These specifications were released originally for material used for interior applications. Typical applications are mats (cupholder, bin) or thumb wheels.

2.1 LIMITATONS

These specifications should be only used for applications with minimal compression set requirements.

3. REQUIREMENTS

3.1 APPROVED SOURCES

This specification requires the use of approved sources. Only the sources identified on the Ford Approved Source List (ASL) can be used when this specification is listed on the drawing, CAD file, or other documents. The list of approved sources is located within Ford at **www.mats.ford.com** or available externally through a Ford Materials Engineer.

3.2 CONDITIONING AND TEST CONDITIONS

All test values are based on material conditioned for not less than 24 h prior to testing in a controlled environment of 23 +/- 2 °C and 50 +/- 5% relative humidity. Testing of the material should occur in the conditioning environment or soon after removal.

3.3 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

3.3.1 The use of regrind is permitted, for economic / environmental reasons, with compliance as indicated in Ford Engineering CAD and Drafting Standard E-4

3.3.2 Materials used in interior applications must meet the requirements outlined in WSS-M99P2222-D1/Latest, *Performance, Vehicle Interior Environment Quality Material/Component Requirements*. Data must be included in material submission package.

3.3.3 Performance Criteria:
Parts using this specification shall meet the appropriate performance specifications, W*SS*-M9P8-C/Latest.

Date	Action	Revisions	Rev. 1
2016 01 11	Revised	See Summary of Revisions	T.Never, EU
2014 12 08	Released		T.Never, M.Corley, EU

Copyright Ford Motor Company
Provided by IHS Markit under license with FORD
No reproduction or networking permitted without license from IHS
Full document details: FORD WSS-M2D507-B4 2016
Copyright © 2016, Ford Global Technologies, LLC
Licensee=/, User=,
Not for Resale,
Documents Document Sharing Hub

3.4 APPEARANCE

3.4.1 Xenon Arc Weatherometer — Rating 4 min
(FLTM BO 116-01, 2406,4 kJ/m² exposure minimum,
specimen size: 150 x, 100 mm minimum,
2.0 +/- 0.2 mm thick molded in smooth polished mold)

3.5 MATERIAL PROPERTIES

3.5.1 Density — Report Only, g/cm^3
(ISO 1183-1, Method A)

3.5.2 Hardness
(ISO 868, 6 mm piled-up specimen, 15 seconds dwell)

B4	70 +/-5 Shore A
B5	80 +/-5 Shore A

3.5.3 Tensile Strength at Break
(ISO 37, Type 2 specimen, 75 x 4 x 2.0 +/- 0.2 mm
500 mm/minute test speed)

3.5.3.1 Parallel to Flow

B4	4.0 MPa min
B5	5.0 MPa min

3.5.3.2 Perpendicular to flow

B4	4.5 MPa min
B5	5.5 MPa min

3.5.4 Elongation at Break
(ISO 37, Type 2 Specimen at 500 mm/min)

3.5.4.1 Parallel to Flow

B4	400 % min
B5	400 % min

3.5.4.2 Perpendicular to flow

B4	500 % min
B5	500 % min

3.5.5 Tensile Modulus at 100 % Elongation
(ISO 37, Type 2 Specimen at 500 mm/min)

3.5.5.1 Parallel to Flow

B4	1.5 MPa min
B5	2.0 MPa min

3.5.5.2 Perpendicular to flow

B4	2.0 MPa min
B5	2.5 MPa min

--`,,```,,,,```-`-`,,`,,`,`,,`---

Documents
Document Sharing Hub

Copyright Ford Motor Company
Provided by IHS Markit under license with FORD
No reproduction or networking permitted without license from IHS
Full document details: FORD WSS-M2D507-B4 2016

Copyright © 2016 Ford Global Technologies, LLC
Licensee=/, User=,
Not for Resale,