THERMOPLASTIC ELASTOMER (TEO) POLYOLEFIN, EPDM RUBBER MODIFIED EXTERIOR WEATHERABLE 60 DUROMETER A HARDNESS — **WSS-M2D378-B1**

THERMOPLASTIC ELASTOMER (TEO) POLYOLEFIN, EPDM RUBBER MODIFIED EXTERIOR WEATHERABLE 68 DUROMETER A HARDNESS — **WSS-M2D379-B1**

THERMOPLASTIC ELASTOMER (TEO) POLYOLEFIN, EPDM RUBBER MODIFIED EXTERIOR WEATHERABLE 73 DUROMETER A HARDNESS — **WSS-M2D380-B1**

THERMOPLASTIC ELASTOMER (TEO) POLYOLEFIN, EPDM RUBBER MODIFIED EXTERIOR WEATHERABLE 84 DUROMETER A HARDNESS — **WSS-M2D381-B1**

THERMOPLASTIC ELASTOMER (TEO) POLYOLEFIN, EPDM RUBBER MODIFIED EXTERIOR WEATHERABLE 90 DUROMETER A HARDNESS — **WSS-M2D382-B1**

1. SCOPE

The materials defined by these specifications are black U.V. stabilized thermoplastic elastomers containing fully cured EPDM elastomer particles. These materials possess good exterior weathering capability and have Durometer A hardness ranging from 60 to 90.

2. APPLICATION

These specifications were released originally for material used for exterior gimps, gaskets and gap hiders for such components as lighting, door handles, mirrors, cowl vent grilles and leaf screens. The materials can be processed by conventional thermoplastics molding techniques such as injection molding, extrusion and blow-molding.

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 MATERIAL TESTING

3.4.1 Preparation of Test Specimens

Whenever possible, all test specimens shall be die-cut from the finished parts. When not feasible, specimens cut from molded test sheets manufactured from the same material and with equivalent cure to molded parts are recommended. The test sheets shall have the following dimensions:

150 x 150 mm, min x 2.0 +/- 0.2 mm

Date	Action	Revisions	
2010 06 11	Revised	See Summary of Revisions	J. Souza, SA
2004 12 16	Revised	Inserted 3.0; Deleted 3.1, 3.2, 3.3, 3.10, 3.11 & 4	
1996 06 17	Activated		M. Myers

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3.5 ORIGINAL PROPERTIES

		378-B1	379-B1	380-B1	381-B1	382-B1
3.5.1	Density, +/- 0.05 g/cm^3 (ISO 1183, Method A /ASTM D 792, Method A1)	0.97	0.98	0.98	0.98	0.96
3.5.2	Hardness, International (ISO 48/ASTM D 1415)	72-82	73-83	80-90	88-98	93-103
3.5.3	Hardness, Durometer A (ISO 868/ASTM D 2240, instantaneous, plied-up specimen)	56-66	63-73	68-78	79-89	85-95
3.5.4	Tensile Strength, MPa, min (ISO 37/ASTM D 412, Die C)	4.5	6.0	7.0	8.5	12.5
3.5.5	Elongation at Break, %, min (Test Method according to para 3.5.4)	300	320	350	400	420
3.5.6	Modulus at 100% Elongation, MPa, min (Test Method according to para 3.5.4)	1.7	2.4	2.8	4.0	5.8
3.5.7	Tear Strength, kN/m, min (ISO 34, Method B, Procedure (a)/ASTM D 624, Die C)					
3.5.7.1	Parallel to Flow	15.0	19.0	23.0	26.0	40.0
3.5.7.2	Perpendicular to Flow	13.0	17.0	23.0	30.0	50.0
3.5.8	Brittleness Point, C, max (ISO 812, Type B specimen/ASTM D 2137, Method A)	-60	**-55**	**-50**	-50	-50
3.5.9	Ozone Resistance, Rating, max (FLTM BP 101-01, Procedure A)	0	0	0	0	0

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