THERMOPLASTIC ELASTOMER, CHLORINATED ETHYLENE [TE(PE-C)], 60 A HARDNESS, EXTERIOR ONLY — **WSB-M2D462-A1**
THERMOPLASTIC ELASTOMER, CHLORINATED ETHYLENE [TE(PE-C)], 70 A HARDNESS, EXTERIOR ONLY — **WSB-M2D462-A2**
THERMOPLASTIC ELASTOMER, CHLORINATED ETHYLENE [TE(PE-C)], 80 A HARDNESS — **WSB-M2D462-A3**

1. SCOPE

The material defined by these specifications is a chlorinated ethylene thermoplastic elastomer (TECE) molding compound.

2. APPLICATION

These specifications were released originally for material used for exterior windshield moldings, door latch mechanism seal, and engine service door latch.

3. REQUIREMENTS

3.0 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

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

3.4 DYNAMIC MECHANICAL ANALYSIS
(ASTM D 4065)

Ford Motor Company, at its option, may establish a shear modulus/ damping vs. temperature curves plotted for -50 to +170 °C temperature range for material/parts supplied to this specification. The shear modulus and damping curves established for initial approval shall constitute the reference standard and shall be kept on file at the designated material laboratory. All samples shall produce shear modulus and damping curves that correspond to the reference standard when tested under the same conditions.

3.5 MOLDED TEST SPECIMEN

3.5.1 Preparation of Test Specimens

Unless otherwise specified, all tests shall be conducted on specimens die cut from injection molded plaques 150 x 100 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.

Date	Action	Revisions	
2010 11 05	Re-Activated	Material in use for antenna mast	L. Schmalz, NA
2009 09 21	N-STATUS	No Replacement Named, No known use.	C. Mracna, NA
1994 04 08	Released	A1/A2 NBoo1l0043054322	J. LaDuke

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 WSB-M2D462-A1 2010
Printed copies are uncontrolled
Copyright © 2010, Ford Global Technologies, LLC
Licensee=/, User=,
Not for Resale,
Documents Document Sharing Hub

				A1	A2	A3
	3.5.2	Density, g/cm^3 (ISO 1183, Method A/ASTM D 792, Method A1)		1.09 - 1.12	1.13 - 1.17	1.15 - 1.19
(s)	3.5.3	Hardness, Durometer A (ISO 868/ASTM D 2240, 6 mm thick plied-up specimen, instantaneous reading)		61 - 67	69 - 75	74 - 82
(s)	3.5.4	Tensile Strength at Break, MPa, min (ISO R 527, type II/ASTM D 412, Die C, 115 x 6 x 2.0 +/- 0.2 mm specimen, 500 mm/minute test speed)		5.0	7.0	9.0
		3.5.4.1	Elongation at Break, %, min (Test according to para 3.5.4)	100	190	150
(s)	3.5.5	Tear Strength, kN/m (ISO 34, Method B, Procedure A/ ASTM D 624, Die C)				
		3.5.5.1	Parallel to Flow	19.0	28.0	34.0
		3.5.5.2	Perpendicular to Flow	10.0	27.0	31.0
	3.5.6	Compression Set, %, max (ISO 815, Large Type-plied specimen/ASTM D 395, Method B, Type 1 plied specimen)				
		3.5.6.1	22 h at 70 +/- 1 °C	60	65	65
		3.5.6.2	70 h at 100 +/- 2 °C	70	77	80
		3.5.6.3	1000 h at 70 +/- 2 °C	75	75	80
	3.5.7	Brittleness Point, C, max (ASTM D 2137, Method A)		-70	-70	-70
	3.5.8	HEAT AGING (ISO 188/ASTM D 573, 1000 h at 100 +/- 2 °C)				
		3.5.8.1	Hardness Change, max	-5	-5	-5
		3.5.8.2	Tensile Strength Change, %, max	+15	+15	+10
		3.5.8.3	Elongation Change, %, max	+40	+35	+35

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 WSB-M2D462-A1 2010

Printed copies are uncontrolled

Copyright © 2010, Ford Global Technologies, LLC
Licensee=/, User=,
Not for Resale,