POLYVINYL CHLORIDE (PVC) ALLOY, FLEXIBLE, 89 DUROMETER A HARDNESS MOLDING COMPOUND, EXTERIOR, PAINTABLE — **WSS-M4D953-A1**

POLYVINYL CHLORIDE (PVC) ALLOY, FLEXIBLE, 76 DUROMETER A HARDNESS MOLDING COMPOUND, EXTERIOR, PAINTABLE — **WSS-M4D953-A2**

1. SCOPE

The materials defined by these specifications are cadmium free flexible polyvinyl chloride/thermoplastic polyurethane alloyed extrusion molding compounds.

2. APPLICATION

These specifications were released originally for materials used for painted exterior ditch panel applications.

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).

3.1.1 All requirements of this specification, identified by symbol (s), shall be met with data representing 3 sigma values.

3.4 MOLDED TEST SPECIMEN

3.4.1 Preparation of Test Specimens

Unless otherwise specified all tests shall be conducted on specimens die cut from ungrained compression molded plaques 50 x 15 x 2.0 +/- 0.2 mm molded according to ISO 293.

			A	A2
	3.4.2	Density, g/cm^3, range (ISO 1183, Method A)	1.27 - 1.35	1.24 - 1.32
(s)	3.4.3	Hardness, Durometer A, range (ISO 868, 6 mm plied-up specimens, 15 s dwell)	85 - 95	70 - 80

Date	Action	Revisions
2006 07 20	Revised	Inserted 3.0; Deleted 3.1, 3.2, 3.3, 3.5, 3.6 & 4
2001 06 22	Revised	Updated A. Cockman
1996 09 10	Activated	K. D. Bailey, G. A. Molnar

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				A	A2
(s)	3.4.4	Tensile Strength at Break, MPa, min (ISO 527-2, test speed: 500 mm/minute)		14	13
	(s)	3.4.4.1	Elongation at Break, min (Test Method according to para 3.4.4)	275	650
(s)	3.4.5	Tear Strength, kN/m, min (ISO 34, Method B, Procedure a)		45	30
	3.4.6	Cold Flexibility at -40 °C (FLTM BN 102-01, except specimen 25 x 150 mm, minimum and 19 - 20 mandrel)		No cracks	No cracks
	3.4.7	Heat Aging Performance (ISO 188, except 150 +/- 50 air changes/h, 1000 h at 100 +/- 2 °C. Unaged property values shall be determined at the time of the aged properties determination)			
		3.4.7.1	Tensile Strength Change, % (Test Method per para 3.4.4)	+/- 15	+/- 15
		3.4.7.2	Elongation Change, % (Test Method per para 3.4.4)	+/- 15	+/- 50
		3.4.7.3	Weight Change, %, max (50 x 25 x 2 +/- 0.2 mm specimen)	10	10

5. GENERAL INFORMATION

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

5.1 MATERIAL IDENTIFICATION FOR RECYCLING PURPOSES

>PVC+TPU<

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