Elastollan® 1185AF001

Thermoplastic Polyurethane Elastomer (Polyether)

BASF Corp. Thermoplastic Polyurethanes

Message:

Elastollan® 1185AF001 is a polyether-based thermoplastic polyurethane (TPU) compound that includes a halogen-containing flame retardant. It has a "V-2" rating in accordance with the UL-94 vertical flame test (at thickness of 0.67 mm or less). This product is designed to be used in extrusion applications that include cable jacketing, film/sheet, hose/hose jacketing and profile extrusion. It exhibits excellent abrasion resistance, toughness, very good low temperature flexibility, hydrolytic stability and fungus resistance. It has excellent damping characteristics and outstanding resistance to tear propagation. Elastollan® 1185AF001 is supplied in inherently white pellet form.

General Information	
Additive	Flame Retardant Halogen
Features	Fungus Resistant Good Abrasion Resistance Good Tear Strength Good Toughness Hydrolytically Stable Low Temperature Flexibility
Uses	Cable Jacketing Hose Profiles
Appearance	White
Processing Method	Extrusion Injection Molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.29	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/8.7 kg)	17 to 33	g/10 min	ASTM D1238
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore A)	87		ASTM D2240
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (Injection Molded)	20.7	MPa	ASTM D412
Flexural Modulus (Injection Molded)	29.0	MPa	ASTM D790
Taber Abrasion Resistance	95.0	mg	ASTM D1044
Abrasion - DIN	40	mm³	DIN 53516
Softening Point - DMA	89	°C	Internal Method
Elastomers	**Nominal Value**	**Unit**	**Test Method**

Tensile Stress			ASTM D412
100% Strain	11.7	MPa	
300% Strain	24.1	MPa	
Tensile Strength	29.0	MPa	ASTM D412
Tensile Elongation (Break)	510	%	ASTM D412
Tear Strength [1]	73.6	kN/m	ASTM D624
Compression Set			ASTM D395B
23°C, 22 hr	35	%	
70°C, 22 hr	85	%	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Glass Transition Temperature	-35.0	°C	Internal Method
Vicat Softening Temperature	70.0	°C	ASTM D1525
Flammability	**Nominal Value**		**Test Method**
Flame Rating (> 0.670 mm)	V-2		UL 94
Injection	**Nominal Value**	**Unit**	
Drying Temperature	100 to 110	°C	
Drying Time	2.0 to 3.0	hr	
Suggested Max Moisture	0.030	%	
Rear Temperature	190 to 220	°C	
Middle Temperature	190 to 220	°C	
Front Temperature	190 to 220	°C	
Nozzle Temperature	210 to 225	°C	
NOTE			
1.	Die C		

Recommended distributors for this material

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