Bayflex® 110-80 (15% Glass)

Polyurethane (Polyether, MDI)

Covestro - PUR

Message:

The Bayflex 110-80 system produces a solid urethane elastomer which has a flexural modulus of approximately 80,000 psi at room temperature. This system can be used with or without milled glass fiber or mineral reinforcements. It combines rapid demold times, excellent integrity at demold, improved release characteristics, and outstanding physical properties, especially heat sag characteristics. The Bayflex 110-80 system is a formulated elastomeric reaction injection molding (RIM) system supplied as two liquid components. Component A is a diphenylmethane diisocyanate (MDI) prepolymer, and Component B is a polyether polyol system. As with any product, use of the Bayflex 110-80 system in a given application must be tested (including field testing, etc.) in advance by the user to determine suitability.

General Information			
UL YellowCard	E61384-247032		
Filler / Reinforcement	Glass fiber reinforced material, 15% filler by weight		
Features	Good demoulding performance		
Forms	Liquid		
Processing Method	Reaction Injection Molding (RIM)		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.14	g/cm³	ASTM D792, ASTM D1622
Molding Shrinkage - Flow (3.18 mm)	0.70	%	Internal method
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Flexural Modulus			ASTM D790
-30°C, 3.18 mm	1900	MPa	ASTM D790
23°C, 3.18 mm	1030	MPa	ASTM D790
65°C, 3.18 mm	689	MPa	ASTM D790
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Break, 3.18 mm)	22.1	MPa	ASTM D412
Tensile Elongation (Break, 3.18 mm)	75	%	ASTM D412
Tear Strength [1] (3.18 mm)	105	kN/m	ASTM D624
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (3.18 mm)	160	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
CLTE - Flow (3.18 mm)	5.0E-5	cm/cm/°C	ASTM D696
Thermoset	**Nominal Value**	**Unit**	**Test Method**
Thermoset Components [2]			
Component a	Mixing ratio by weight: 69		
Component B	Mixing ratio by weight: 100		
Additional Information	**Nominal Value**	**Unit**	**Test Method**
Heat Sag - 4 in Overhang [3] (121°C, 3.18 mm)	4.06	mm	ASTM D3769

Part A
Type: Isocyanate
Appearance: Light yellow to yellow liquid
Specific Gravity @ 25°C: 1.21
Viscosity @25°C: 700 mPa-s
Flash Point PMCC: 213 °C
Part B
Type: Polyol
Appearance: Dark amber liquid
Specific Gravity @ 25°C: 1.03
Viscosity @25°C: 1200 mPa-s
Flash Point PMCC: 170 °C
Molding Parameters
Material Temperature: 32 °C
Mold Temperature: 60 to 65 °C
Typical Cure Time, 0.125 in: 20 to 30 sec
Polyol Nucleation - Specific Gravity: 0.70 to 0.75 0

NOTE	
1.	C mould
2.	105 Index
3.	1 hr

Recommended distributors for this material

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