Bayflex® 120-50

Polyurethane (Polyether, MDI)

Covestro - PUR

Message:

Bayflex 120-50 is a polyurea RIM system designed to provide increased productivity compared to the typical amine-extended urethane systems. Bayflex 120-50 polyurea is recommended for applications such as automotive fascia, side moldings, exterior trim panels, wheel well flares, etc. Faster cure time, less frequent application of external mold release agent, and reduced mold cleaning are possible, providing increased productivity. (A 40% increase in parts per shift has been observed in test applications.) The Bayflex 120-50 polyurea system also provides a superior property profile compared to amine-extended urethane systems, with better dimensional stability and part appearance.
Reinforcements, such as milled glass fibers, wollastonite, and Covestro's proprietary DOI filler can be used for further improvement in overall dimensional stability. As with any product, use of the Bayflex 120-50 polyurea system in a given application must be tested (including field testing, etc.) in advance bythe user to determine suitability.
Bayflex 120-50 is a formulated reaction injection molding system (RIM) supplied as two liquid components. Component A is a diphenylmethane diisocyanate (MDI) prepolymer and Component B is a polyether amine.

General Information			
Features	Good dimensional stability Good appearance		
Uses	Application in Automobile Field Automotive exterior parts Car exterior decoration Strap		
Forms	Liquid		
Processing Method	Reaction Injection Molding (RIM)		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.04	g/cm³	ASTM D1622
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Break)	27.6	MPa	ASTM D638
Tensile Elongation (Break)	250	%	ASTM D638
Flexural Modulus (23°C)	372	MPa	ASTM D790
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Break)	27.6	MPa	ASTM D412
Tensile Elongation (Break)	250	%	ASTM D412
Tear Strength [1]	96.3	kN/m	ASTM D624
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	480	J/m	ASTM D256
Thermoset	**Nominal Value**	**Unit**	**Test Method**
Thermoset Components			
Component a	Mixing ratio by weight: 100		
Component B	Mixing ratio by weight: 100		
Demold Time	0.25 - 0.50	min	

Additional Information	Nominal Value	Unit	Test Method
Heat Sag - 6 in Overhang [2] (121°C)	7.62	mm	ASTM D3769

Part A
Type: Isocyanate
Appearance: Dark brown liquid
Specific Gravity @ 25°C: 1.13
Viscosity @25°C: 550 mPa-s
Flash Point PMCC: 204 °C
Part B
Type: Polyol
Appearance: Pale yellow to tan liquid
Specific Gravity @ 25°C: 1.05
Viscosity @25°C: 750 mPa-s
Flash Point PMCC: 174 °C
Molding Parameters
Material Temperature - Component A: 38 to 49 °C
Material Temperature - Component B: 38 to 49 °C
Mold Temperature: 66 °C

NOTE	
1.	C mould
2.	1 hr

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China