Baydur® GS-772

Polyurethane (MDI)

Covestro - PUR

Message:

Baydur GS-772 is a solid polyurethane system used in the reaction injection molding (RIM) process. The system is supplied as two reactive liquid components. Component A is a polymetric diphenylmethane diisocyanate (PMDI) and component B is a formulated polyol system.
Baydur GS-772 system is used in applications where harsh environmental conditions are encountered, such as pump housings, catch basins, and underground equipment. It is also used as a replacement for cast iron where the application requires weight reduction, improved corrosion resistance, and/or improved abrasion resistance. As with and product, use of the Baydur GS-772 system in a given application must be tested (including field testing, etc.) in advance by the user to determine suitability.

General Information			
Features	Good corrosion resistance Good wear resistance		
Uses	Pump parts		
Processing Method	Injection molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity			
--	0.708	g/cm³	ASTM D1622
--	1.13	g/cm³	ASTM D792
Molding Shrinkage - Flow	1.0 - 1.2	%	Internal method
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore D)	76		ASTM D2240
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Break)	39.3	MPa	ASTM D638
Tensile Elongation (Break)	10	%	ASTM D638
Flexural Modulus	1380	MPa	ASTM D790
Flexural Strength	60.0	MPa	ASTM D790
Compressive Strength	34.5	MPa	ASTM D695
Films	**Nominal Value**	**Unit**	**Test Method**
Film Thickness - Tested	6400	µm	
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	48	J/m	ASTM D256
Unnotched Izod Impact	370	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (0.45 MPa, Unannealed)	98.9	°C	ASTM D648
Flammability	**Nominal Value**		**Test Method**
Flame Rating	V-0		UL 94
Thermoset	**Nominal Value**		
Thermoset Components			

Component a	Mixing ratio calculated by weight: 100, mixing ratio calculated by capacity: 86
Component B	Mixing ratio by weight: 100, mixing ratio by capacity: 100

Additional Information

Part A
Type: Isocyanate
Appearance: Dark brown liquid
Specific Gravity @ 25°C: 1.24
Viscosity @ 25°C: 200 mPa*s
Flash Point PMCC: 199°C
NCO: 31.0 min wt%
Part B
Type: Polyol
Appearance: Black liquid
Specific Gravity @ 25°C: 1.05
Viscosity @ 25°C: 1700 mPa*s
Flash Point PMCC: 206°C
Water: 0.08 wt%
Hydroxyl Number: 370 mg KOH/g
Material Temperature: 32 to 38°CMold Temperature: 60 to 71°CMachine Reactive @ 35°C: 16 secTypical Cure Time: 3 to 6 minTypical Mold Density: 65 to 71 lb/ft^3

Recommended distributors for this material

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