Baydur® 641 IBS (20 pcf)

Polyurethane (MDI)

Covestro - PUR

Message:

Baydur 641 IBS is a rigid polyurethane structural foam system used in the reaction injection molding (RIM) process. This system is supplied as two reactive liquid components and is typically used with a blowing paste purchased separately. Component A is a polymeric diphenylmethane diisocyanate (PMDI). Component B is a formulated polyol system containing no CFC- or HCFC-blowing additives. The blowing paste is Baydur PU-1731.
The Baydur 641 IBS system is used in the industrial and medical equipment markets for applications requiring dimensional stability and excellent surface finish, such as, rollers for photographic and X-ray film processing equipment. As with any product, use of Baydur 641 IBS system in a given application must be tested (including field testing, etc.) in advance by the user to determine suitability.

General Information			
Features	Good dimensional stability Excellent appearance		
Uses	Structural Foam Industrial application Medical/nursing supplies		
Processing Method	Reaction Injection Molding (RIM)		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	0.319	g/cm³	ASTM D792
Molding Shrinkage - Flow (12.7 mm)	0.30 - 0.50	%	ASTM D955
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore D, 12.7 mm)	42		ASTM D2240
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Break, 12.7 mm)	5.24	MPa	ASTM D638
Tensile Elongation (Break, 12.7 mm)	8.0	%	ASTM D638
Flexural Modulus (12.7 mm)	276	MPa	ASTM D790
Flexural Strength (12.7 mm)	11.0	MPa	ASTM D790
Compressive Strength (12.7 mm)	3.79	MPa	ASTM D695
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Unnotched Impact Strength [1]	5.3	kJ/m²	Internal method
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (0.45 MPa, unannealed, 12.7mm)	60.0	°C	ASTM D648
Thermoset	**Nominal Value**		
Thermoset Components			
Component a	Mixing ratio by weight: 110		
Component B	Mixing ratio by weight: 100		
Additional Information			

Part A
Type: Isocyanate
Appearance: Dark brown liquid
Specific Gravity @ 25°C: 1.24
Viscosity @25°C: 200 cps
Flash Point PMCC: 199°C
NCO: 31.5 wt%
Part B
Type: Polyol
Appearance: Pale yellow liquid
Specific Gravity @ 25°C: 1.02
Viscosity @25°C: 2000 cps
Flash Point PMCC: 187°C
Water: 0.45 wt%
Hydroxyl Number: 367 KOH/g
Material Temperatures: 27 to 35°CMold Temperature: 60 to 70°CHand Mix Reactivity at 25°C
Cream Time: 8 to 13 sec
Gel Time: 15 to 25 sec
Tack Free Time: 23 to 28 sec
Free-Rise Density: 7.5 to 10 lb/ft^3
Polyol Nucleation Specific Gravity: 0.85 to 0.90 0Typical cure Time, 0.500 in Thickness: 4 sec

NOTE	
1.	0.5 in

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