BJB Polyurethane SP-200 A/B

Polyurethane Thermoset Elastomer

BJB Enterprises, Inc.

Message:

SP-200 A/B is a two component rigid polyurethane material designed to provide high strength, high impact, and good heat resistance for the fabrication of structural parts, composite type structures, and for coatings that serve many purposes. During the spray application, coating thickness builds quickly due to the 97% solids composition of the system. SP-200 A/B bonds readily to itself during build-up and it shows excellent bonding results sprayed against other plastics, wood, and metals. The SP-200 A/B has an extremely low V.O.C. content. The volatile organic compounds (V.O.C.) contained in the mixed A and B components total less than 40 grams per liter. This translates into a great advantage for compliance with health, safety, and environmental programs. SP-200 A/B can be sprayed with conventional plural component high pressure spray equipment or with BJB's CPE-25 and CPE-40 pneumatic hand held spay guns.
Product Highlights:
Provides very rapid production of parts, composite structures, and molds
Provides excellent surface finishes built on polyurethane rigid foam and styrofoam
Superior adhesion to a wide variety of substrates, most notably rigid foams and wood
Excellent impact resistance coupled with high flexural strength
Provides very fine detail reproduction
Convenient 1:1 by volume mix ratio

General Information			
Features	High strength Impact resistance, high Good adhesion Excellent appearance		
Uses	Coating application		
Appearance	Light gray		
Forms	Liquid		
Processing Method	Sprayable		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity			
-- [1]	1.04	g/cm³	
-- [2]	1.19	g/cm³	
--	1.06	g/cm³	ASTM D792
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore D)	76 - 80		ASTM D2240
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Yield)	35.0	MPa	ASTM D638
Tensile Elongation (Yield)	17	%	ASTM D638
Flexural Modulus	1720	MPa	ASTM D790
Flexural Strength	62.7	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Unnotched Izod Impact	49	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**

Deflection Temperature Under Load			ASTM D648
0.45 MPa, not annealed	88.9	°C	ASTM D648
1.8 MPa, not annealed	82.2	°C	ASTM D648
Thermoset	**Nominal Value**	**Unit**	**Test Method**
Thermoset Components			
Component a	Mixing ratio by weight: 100, mixing ratio by capacity: 100		
Component B	Mixing ratio by weight: 90, mixing ratio by capacity: 100		
Shelf Life	26	wk	
Thermoset Mix Viscosity			Brookfield
25°C [3]	1350	cP	Brookfield
25°C [4]	550	cP	Brookfield
Demold Time [5] (25°C)	30 - 45	min	
Gel Time (25°C)	30.0	sec	
Cure Time	2.0 - 3.0	day	
Additional Information	**Nominal Value**	**Unit**	**Test Method**

Note: Physical properties obtained from test specimens post cured per recommended procedure.After demolding, allow parts to further cure at room temperature for 2 to 4 hours. It is recommended that parts be post-cured at 120-130°F (49-54°C) for 2 - 4 hours, followed by 4 - 6 hours at 180 ± 10°F (82 °C). Support may be needed for certain configurations during this process.

NOTE	
1.	Part B
2.	Part A
3.	Part B
4.	Part A
5.	1/8" thick

Recommended distributors for this material

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