

# BJB Polyurethane TC-680 A/B

Polyurethane Thermoset Elastomer

BJB Enterprises, Inc.

Message:

TC-680 A/B is a two-component polyurethane elastomer compound specifically designed for casting applications. This product is a safe, easy-to-handle, room temperature mixing and curing system that contains no TDI, MDA, or MOCA. The low shrinkage, superior toughness, and excellent detail reproduction of TC-680 A/B makes this system ideal for general purpose castings and quality tooling operations.

General Information			
Features	General Purpose		
	Low Shrinkage		
	Ultra High Toughness		
Uses	General Purpose		
Appearance	Green		
Forms	Liquid		
Processing Method	Casting		
Physical	Nominal Value	Unit	Test Method
Specific Gravity			
--	1.04	g/cm <sup>3</sup>	ASTM D792
-- <sup>1</sup>	1.06	g/cm <sup>3</sup>	
-- <sup>2</sup>	1.09	g/cm <sup>3</sup>	
Specific Volume	0.936	cm <sup>3</sup> /g	
Gel Time	25.0	min	
Work Time <sup>3</sup> (25°C)	20.0	min	
Weight Gain - 24-hour water immersion	3.7	%	
Molding Shrinkage - Flow	0.20	%	ASTM D2566
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A)	75 to 85		ASTM D2240
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	30.2	MPa	ASTM D412
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ASTM D412
100% Strain	4.07	MPa	
200% Strain	5.17	MPa	
300% Strain	6.21	MPa	
Tensile Strength (Yield)	10.2	MPa	ASTM D412
Tensile Elongation (Break)	720	%	ASTM D412
Tear Strength	39.4	kN/m	ASTM D624
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	5.0E+15	ohms	ASTM D257

Dielectric Constant (1 kHz)	3.90		ASTM D150
Dissipation Factor (1 kHz)	0.010		ASTM D150
Insulation Resistance	3.0E+12	ohms	
Thermoset	Nominal Value	Unit	Test Method
Thermoset Components			
Part A	Mix Ratio by Weight: 100, Mix Ratio by Volume: 100		
Part B	Mix Ratio by Weight: 50, Mix Ratio by Volume: 49		
Shelf Life	26	wk	
Thermoset Mix Viscosity			ASTM D2393
25°C <sup>4</sup>	60.0	cP	
25°C <sup>5</sup>	6000	cP	
25°C <sup>6</sup>	2100	cP	
Demold Time (25°C)	240 to 360	min	
Post Cure Time (25°C)	120 to 170	hr	
NOTE			
1.	Part A		
2.	Part B		
3.	100 g mass		
4.	Part B, Brookfield		
5.	Part A, Brookfield		
6.	Mixed, Brookfield		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### 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



WECHAT