

BJB Polyurethane TC-421 A/B-C CASTABLE

Polyurethane Thermoset Elastomer

BJB Enterprises, Inc.

Message:

TC-421 A/B-C can be used for a great variety of applications. The standard uses for this product include the creation of soft, yet flexible and durable materials, for animated characters, costumes, prosthetics, movie props and test mannequins.

The TC-421 A/B-C product offers new dimensions in its ability to stretch and recover while maintaining high tear strength even in the soft to very soft hardness range. Additionally, advancements in lowering surface tack and cure time allow the user to achieve realism in skin-like quality in a remarkable time frame. This system provides further control by allowing you to select the desired levels of stretch, recovery and hardness by the amount of the "C" component used with the basic "A" and "B" mixture.

General Information			
Features	Durable		
	Good Flexibility		
	Good Stretchability		
	Good Tear Strength		
	Soft		
Uses	Modeling Material		
	Prosthetics		
Appearance	Translucent		
	Yellow		
Forms	Liquid		
Processing Method	Casting		
Physical	Nominal Value	Unit	Test Method
Specific Gravity			ASTM D792
-- ¹	0.948	g/cm ³	
-- ²	1.02	g/cm ³	
--	1.05	g/cm ³	
-- ³	1.09	g/cm ³	
Specific Volume	0.965	cm ³ /g	
Gel Time ⁴	20.0 to 25.0	min	
Work Time ⁵ (25°C)	15.0 to 20.0	min	
Molding Shrinkage - Flow	0.20	%	ASTM D2566
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A ⁶	10 to 20		
Shore OO ⁷	30 to 40		
Shore OO ⁸	40 to 50		
Shore OO ⁹	65 to 75		

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	0.186	MPa	ASTM D412
Elastomers	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	3.90	MPa	ASTM D412
Tensile Elongation (Break)	1300	%	ASTM D412
Tear Strength ¹⁰	10.7	kN/m	ASTM D624
Electrical	Nominal Value		Test Method
Dielectric Constant (1 MHz)	6.61		ASTM D150
Dissipation Factor (1 MHz)	0.051		ASTM D150
Thermoset	Nominal Value	Unit	Test Method
Thermoset Components			
Part A	Mix Ratio by Weight: 50, Mix Ratio by Volume: 47		
Part B	Mix Ratio by Weight: 100, Mix Ratio by Volume: 100		
Shelf Life	26	wk	
Thermoset Mix Viscosity			ASTM D2393
25°C ¹¹	1240	cP	
25°C ¹²	10.0	cP	
25°C ¹³	1050	cP	
25°C ¹⁴	170	cP	
Demold Time (25°C)	480 to 720	min	
Post Cure Time (25°C)	120 to 170	hr	
NOTE			
1.	Part C		
2.	Part B		
3.	Part A		
4.	A & B with no C		
5.	100g mass, A & B with no C		
6.	A & B		
7.	A & B with 75% C		
8.	A & B with 50% C		
9.	A & B		
10.	Die C		
11.	Part B, Brookfield		
12.	Part C, Brookfield		
13.	Mixed, Brookfield, A & B; with no C		
14.	Part A, 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

