Q Barnes

Technical Data Sheet

Product Name

TC-808 Jet Black A/B 78 Shore D Urethane Casting System Jet Black



Product Description

TC-808 Jet Black A/B is a low viscosity, rapid setting, and rigid urethane compound. This system will cure quickly to a hard, tough casting. TC-808 Jet Black A/B is generally insensitive to moisture during and after cure and will readily bond to itself if stage pours are required. TC-808 Jet Black A/B is recommended in applications where a "thermoplastic feel" is desired.

Physical Properties

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Hardness	Shore D	ASTM D-2240	78 ± 2
Specific Gravity, cured	g/cc	ASTM D-792	1.08
Cubic Inches per Pound			25.7
Tensile Strength	psi	ASTM D-638	6000
Tensile Modulus	psi	ASTM D-638	190000
Elongation	%	ASTM D-638	7.0
Flexural Strength	psi	ASTM D-790	6225
Flexural Modulus	psi	ASTM D-790	170000
Shrinkage	linear (12" x 1/2" x 1/2") in/in		0.004
Izod Impact	Notched Ft-lbs/in	ASTM D-256	0.52
Heat Deflection	@ 66 psi	ASTM D-648	77° C
Temperature	·		

Handling Properties

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Mix Ratio	by weight	Part A	100 pbw	
		Part B	100 pbw	
Mix Ratio	by volume	Part A	90 pbv	
		Part B	100 pbv	
Specific Gravity	g/cc	Part A	1.14	
		Part B	1.02	
Viscosity	cps at 25° C	Part A	90	
		Part B	300	
		Mixed	200	
Color		Part A	Pale Yellow	
		Part B	Black	
Work Time	100g mass @ 25° C		2 – 2.25 minutes	
Demold Time	@ 25° C		10-20 minutes (see	
			Note 1)	
Cure Schedule	Most of the physical properties can be achieved in 5-7 days at 25°C. you			
	may use your own post-cure schedule but the physical properties may			
	vary from BJB's cure schedule of 1-3 hours at 25°C followed by 16 hours			
	at 82°C. Do not exceed curing temperatures of 93°C, support of the part			

may be required to prevent part deforming during the heat curing process.

Properties above are typical and not for specifications

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Storage

Store at room temperature in a dry area. Unopened containers will have a shelf life of six months, from date of shipment, when properly stored under normal conditions at 25° C.

Note 1

TC-808 Jet Black A/B generally cures to a demoldable state in about 10-20 minutes; however, thin sections or certain part configurations may require more in-mold cure time. TC-808 Jet Black A/B gains increasing toughness early in the cure cycle and thick sections, (3/8" or greater), may be demolded much sooner. Sections that are less than an 1/8" may require an hour or more before demold.

Note 2

The "B" side should be remixed before each use until uniform in appearance. Opened containers of material should be purged with dry nitrogen prior to replacing lids or caps to prevent moisture contamination from humid air.

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Revision Number

2

Disclaimer

The data presented in this leaflet are in accordance with the present state of our knowledge, and does not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this leaflet should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. Recommendations for use do not constitute a warranty, either expressed or implied, of the fitness or suitability of the product for a particular purpose.

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