



# JetBlack TC-808 Jet Black A/B

## 78 SHORE D URETHANE CASTING SYSTEM



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

- Prototyping
- Molding
- Non-mercury
- Special Effects
- Slush/Roto Casting
- Tough, Heat Resistant

PHYSICAL PROPERTIES	TEST METHOD	RESULTS
Hardness, Shore D	ASTM D2240	78 ± 2
Density (g/cc)	ASTM D792	1.08
Cubic Inches per Pound	N/A	25.7
Color/Appearance	Visual	Black
Tensile Strength (psi)	ASTM D638	6,000
Tensile Modulus (psi)	ASTM D638	190,000
Elongation (%)	ASTM D638	7
Flexural Strength (psi)	ASTM D790	6,225
Flexural Modulus (psi)	ASTM D790	170,000
Shrinkage (in/in) linear	12"x1/2"x1/2"	0.004
Izod Impact, notched (ft-lb/in)	ASTM D256	0.52
Heat Deflection Temperature, 66 psi	ASTM D648-04	170°F (76.7°C)

HANDLING PROPERTIES	Part A	Part B
Mix Ratio by weight	100	100
Mix Ratio by volume	90	100
Specific Gravity @ 77°F (25°C)	1.14	1.02
Color	Pale Yellow	Black
Viscosity (cps) @ 77°F (25°C) Brookfield	90	300
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	200	
Work Time, 100g mass @ 77°F (25°C)	2 – 2.25 minutes	
Demold Time @ 77°F (25°C)	10 – 20 minutes (see Note 1)	

Properties above are typical and not for specifications.

**CURE SCHEDULE/HEAT CURING:**

Most of the physical properties can be achieved in 5-7 days at 77°F (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 77°F (25°C) followed by 16 hours at 180 °F (82°C). Do not exceed curing temperatures of 200°F (93°C). Support of the part may be required to prevent part deformation during the heat curing process.

**NOTE 1:**

TC-808 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 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 a 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.

**STORAGE:**

Store at ambient temperatures, 65-80°F (18-27°C). Unopened containers will have a shelf life of 6 months from date of shipment when properly stored at recommended temperatures. Purge opened containers with dry nitrogen before re-sealing.

<b>PACKAGING</b>	<b>Part A</b>	<b>Part B</b>	<b>Cubic Inches per Kit</b>
Quart Kits	2 lbs.	2 lbs.	103
Gallon Kits	8 lbs.	8 lbs.	411
5-Gallon Kits	40 lbs.	40 lbs.	2,056

**SAFETY PRECAUTIONS:**

Use in a well-ventilated area. Avoid contact with skin using protective gloves and protective clothing. Repeated or prolonged contact on the skin may cause an allergic reaction. Eye protection is extremely important. Always use approved safety glasses or goggles when handling this product.

**IF CONTACT OCCURS:**

**Skin:** Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. It is *not* recommended to remove resin from skin with solvents. Solvents only increase contact and dry skin. Seek qualified medical attention if allergic reactions occur.

**Eyes:** Immediately flush with water for at least 15 minutes. Call a physician.

**Ingestion:** If swallowed, call a physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel. Never give anything by mouth to an unconscious person.

**⚠️WARNING:** This product can expose you to chemicals including Carbon black and 1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**NOTE:**

**Refer to the Safety Data Sheet before using this product. For processing tips and guides, please visit: [learn.bjbmaterials.com](http://learn.bjbmaterials.com) to discover additional information.**