

# Prototype Materials



## Mold Making Materials

### BC 9020

#### Silicone RTV Rubber

BC 9020 is a violet colored, two-component, flowable compound that regardless of thickness or confinement, cures at room temperature. The cured rubber is high strength and high tear with good elongation. In addition, BC9020 features low viscosity, low durometer and resistance to sulfur clays.

Features:

- Mix ratio: 10:1
- Pot life: 1 hour
- Viscosity (mixed): 31,000cps
- Time for 90% cure: 24hour
- Full cure: 1-2days
- Hardness(shore): 20-25A
- Color: Violet

### BC9040T Clear Silicone

BC 9040T is a clear, addition/platinum cure, two-component, flowable compound that, regardless of thickness or confinement, cures at room temperature or by application heat. The cured rubber is high strength and high tear with good elongation. BC9040T is a mold-making material recommended for repetitive production of intricate shapes cast in epoxy or urethane resins. It is also used in the potting of electronic components and in protecting sensitive assemblies against thermal shock and vibration. Must be used with BC8782 Ultra Clear Prototyping urethane.

Features:

- Mix ratio: 10:1
- Pot life: 1.5 hour
- Viscosity (mixed): 38,000cps
- Hardness(shore): 40A
- Color: Translucent

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### BC8782 Ultra Clear

BC 8782 produces a high impact rigid 82 Shore D material that is commonly used to make clear or tinted castings of all kinds. When used at room temperature castings 1/8" thick or larger can be readily cast. Castings that are less than 1/8" thick generally require a mild post-cure. Easily tintable using BCC color tints. This system is not recommended for use with tin cure silicones.

Features:

- Mix ratio: 100:85 by wt.
- Mix ratio: 100:88 by vol.
- Pot life: 12-14 minutes
- Viscosity (Mixed) 650cps
- Demold time: 6-8 hours
- Hardness (shore): 82D
- Color: Clear

### BC8163 Proto-Kast

BC 8163 is a very low viscosity, rapid setting, rigid urethane compound. This system will cure quickly to a hard, tough, impact resistant casting. BC 8163 is non-sensitive to moisture after cure and will readily bond to itself if stage pours are required. The one-to-one volume mix ratio makes the system readily adaptable for machine mixing and dispensing. BC 8163 is recommended in applications where a "thermoplastic feel" is desired.

Features:

- Mix ratio: 100:96 by wt.
- Mix ratio: 100:100 by vol.
- Pot life: 2-2.5 minutes
- Viscosity (Mixed) 100-150cps
- Demold time: 20-60 minutes
- Final Cure: 7days
- Hardness (shore):78D +5
- Color: White

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### BC8400

BC8400 is an unfilled, low viscosity, quick setting two component urethane system. An easy to use 1 to 1 mix ratio (Part A/Part B), BC8400 offers the user a 3 minute working time with parts demoldable in as little as 30 minutes. When properly cured, BC 8400 will exhibit high impact strength and yield thermoplastic-like parts.

Some outstanding features include the following:

- \*Mercury free
- \*High impact strength
- \*Moderate heat resistance
- \*No objectionable odor
- \*1 to 1 mix ratio
- \*Excellent finishing properties
- \*Turns white upon cure
- \*Thermoplastic appearance
- \*Longer mold life
- \*More parts per day
- \*Long Pot life version available in BC8405

Features:

- Mix ratio: 100:100 by wt.
- Mix ratio: 100:100 by vol.
- Pot life: 3 minutes
- Viscosity (Mixed) 190cps
- Demold time: 30-60 minutes
- Hardness (shore): 75D +3

We have a wide selection of prototyping materials. These are simply a selection of our most popular items in this field. Ask us for a product that meets your specifications.