



BCC PRODUCTS, INC.

BLEHM PLASTICS

FAST CAST – EPOXIES – ADHESIVES - POLYSULFIDES - URETHANES – POLYESTER PASTES – TOOLING BOARDS – RELEASE AGENTS – SILICONES

METAL-KAST

(Aluminum)

BC8010

Urethane

NEW

New BC8010 is a quick setting urethane reproduction plastic system that simulates many of the desirable characteristics of aluminum metal. A highly machineable tooling material that is now easier to premix due to less settling. New BC8010 exhibits good heat transfer properties and is ideally suited for a multitude of applications, to include construction of short run low temperature vacuum form tools, prototypes, models, display parts, fixturing and bulk back fill.

Working Properties

Mix Ratio (by weight or volume)	1 to 1
Mixed Viscosity (1 minute)	2,250 cps
Brookfield (#3 spindle @ 20 rpm)	
Working Life, 24°C (75° F), 1 lb. mass	6-7 minutes
Color, Part A	Aluminum Gray
Part B	Aluminum Gray
Cured	Aluminum Gray
Demold Time, 24° C (75° F)	1 ½ to 2 hours *

Physical Properties

Specific Gravity (cured) gms/cc	1.75-1.85
Lbs./cu.in.	0.066
Cu. in./lb.	15.16
Hardness, Shore D @ 75° F	83
Ultimate Tensile Strength (ASTM D638)	4,046 psi
Ultimate Flexural Strength (ASTM D790)	6,650 psi
Compressive Strength (ASTM D695)	9,750 psi
Linear Shrinkage (ASTM D2566)	0.0007 in/in **
Deflection Temperature °F	179

*Dependant upon wall thickness of casting

** Results obtained from a 24 hour demold.

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METAL-KAST

BC8010

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Handling Properties

BCC's Metal-Kast is a fast-setting, two part casting system which requires careful preparation prior to mixing parts A and B. Because Metal-Kast contains components of high density there will be some separation at the bottom of each container. Using a paint shaker, jiffy mixer, or mixing spatula, re-suspension of the ingredients is easily accomplished. Precaution should be taken to prevent any moisture contamination from containers or utensils. It is recommended that the work area be well ventilated and normal cleanliness and safety rules be observed. Avoid prolonged exposure to vapors and contact with skin.

Preparation of Mold Surface

Clean the surface from dust and possible presence of moisture. Apply **BC87** Parting Agent and polish to a uniform high gloss finish (usually 2-3 coats are recommended). For plaster or wood surfaces seal with PVC sealer to ensure complete absence of moisture, followed by 2-3 coats of **BC87** Parting Agent.

Mixing and Pouring

Although not necessary, best results are obtained by evacuation of each component under 29 inches of vacuum which removes entrapped air prior to blending the two components. Pour weighed or measured amounts of Part A & B into a separate dry container by pouring Part A into Part B. Mix with a spatula or mechanical stirrer for 30-40 seconds for quart size batches or 40-50 seconds for gallon batches while avoiding air entrapment. Immediately pour mixed resin uninterrupted from a convenient height above the mold cavity. Clean your mixing tools by rinsing in an alcohol type solvent. Larger masses (2 feet or more) may be built-up with successive pours. Castings may be demolded within 1 ½ - 2 hours but should be properly supported while "green". Under normal conditions, maximum hardness or cure will be achieved in 12-18 hours.

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