

# Product Data



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## UCA1010/UCB1010

### TWO COMPONENT FLEXIBLE POLYURETHANE CASTING RESIN

#### FEATURES

\*\*\* TOUGH, FLEXIBLE POLYMER \*\*\*

\*\*\* RAPID GEL & CURE \*\*\*

\*\*\* VERY LOW ODOR (NO HYDROCARBON EXTENDERS) \*\*\*

UCA-1010/UCB-1010 is a two-component polyurethane casting system that, when mixed in the proper 4.5:1 by volume ratio, quickly reacts to give a flexible yet extremely tough and durable polyurethane polymer. Among the applications for such a polymer are the casting of mold divider bars and gasketing materials.

This casting system is also characterized by its very low odor due to the absence of the hydrocarbon extenders that are common to some polyurethane casting resins.

#### TYPICAL LIQUID PROPERTIES

	<u>UCA-1010</u>	<u>UCB-1010</u>
Specific Gravity, 77°F:	1.21-1.23	1.01-1.03
Weight per Gallon:	10.10-10.30	8.40 - 8.60
Color:	Brown	Clear
Viscosity, Zahn #2 Cup:	-----	60-80 seconds
Viscosity, Brookfield, #3 Spindle	750 - 800 cPs	-----

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## APPLICATION

UCA-1010 and UCB-1010 are shipped as separate components. When combined in the proper ratio of 4.5:1 by volume, they will quickly react to form a flexible, tough and durable polyurethane polymer. Correct volumes of the two components should be measured, combined and mixed for 20-30 seconds, then immediately poured into the desired mold. The polymer will gel in 90-120 seconds from the initial blending point. It is critical that all of the mixing and pouring be completed in about 50 seconds from the initial mixing of the two components in order to facilitate complete flow and filling of the cavity before gelation.

### TYPICAL GEL AND CURE VALUES OF MIXED POLYURETHANE

Mixing Ratio: 1 part of UCA-1010:4.5 parts of UCB-1010 by volume  
26.3 parts by weight of UCA-1010;  
100 parts by weight of UCB-1010

Recommended Mixing  
Temperatures: 70-80°F

Mixing Time: 20-30 seconds and pour immediately

Gel Time: 90-120 seconds

Gel To Peak  
Exotherm Time: 4-5 minutes

Peak Exotherm,  
100cc mass, 2" thick: 230-260°F

Color of Cured Part: Milky White

Hardness of Casting  
Shore A: 60

Caution: UCA-1010 and UCB-1010 are both very sensitive to moisture and increased moisture can adversely affect the quality of the casting. Keep containers well sealed when not in use and do not allow the individual components to stand exposed to air for more than a few minutes before mixing.

UCA-1010 and UCB-1010 are subject to hazing at low temperatures. If the liquid in the container appears hazy, it is imperative that this material be carefully heated and agitated until the liquid becomes clear.