



908 LENOIR ROAD • POST OFFICE BOX 1809 HICKORY, NORTH CAROLINA • 28603-1809 TELEPHONE (828) 328-1721 TOLL FREE (800) 334-5975 FAX (828) 328-4572

UCA-1020/UCB-1020

TWO COMPONENT RESILIENT POLYURETHANE CASTING RESIN

FEATURES

** TOUGH, RESILIENT POLYMER ***

*** RAPID GEL & CURE ***

*** EXCELLENT REPRODUCTION OF MOLD DETAIL ***

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

UCA-1020/UCB-1020 is a two-component polyurethane casting system that, when mixed in the proper 1:1 by volume ratio, quickly reacts to give a resilient yet extremely tough and durable polyurethane polymer. Among the applications for such a polymer are the casting of furniture moldings, picture frames and similar products that require excellent reproduction of mold detail.

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-1020</u>	<u>UCB-1020</u>
Specific Gravity, 77°F:	1.09-1.11	0.99-1.00
Weight per Gallon:	9.07-9.24	8.23-8.33
Color:	Brown	Clear
Viscosity, Zahn #2 Cup:	16-20 seconds	16-20 seconds

page 1 of 2 HKR051-030789rev

The information and data given in this bulletin are based on tests, which are considered to be reliable and accurate. Because of environmental conditions beyond our control, however, no warranty is given concerning the results obtained by the user of HK Research products. Each user should satisfy himself, by adequate testing, of the suitability of HK Research products for his particular application.

APPLICATION

UCA-1020 and UCB-1020 are shipped as separate components. When combined in the proper ratio of 1:1 by volume, they will quickly react to form a resilient, tough and durable polyurethane polymer. Equal 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 70-100 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:	One part of UCA-1020:one part of UCB-1020 by volume
Recommended Mixing Temperatures:	70-80°F
Mixing Time:	20-30 seconds and pour immediately
Gel Time:	70-100 seconds
Gel To Peak Exotherm Time:	2-4 minutes
Peak Exotherm, 100cc mass, 2" thick:	200-220°F
Color of Cured Part: Cream	1
Hardness of Casting Shore D:	70

<u>Caution</u>: UCA-1020 and UCB-1020 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.

page 2 of 2 HKR051-030789rev