

# CU-1 - Specifications

## Description

This material has high transparency (water clear) and is easy to process and polish. It has very high reproduction accuracy and is also UV resistant. Additionally, this material is mercury free.

## Applications

- Commercial product testing
- Functional assembly
- Public surveys
- Field testing
- Visual evaluation
- Aesthetic evaluation
- Jewelry, art and decoration parts

## Thermal and Specific Properties\*

<b>Glass transition temperature</b> ASTM E1545	216°F
<b>Coefficient of thermal expansion</b> ASTM D-1546	44x10 <sup>-6</sup> in./in./°F
<b>Shrinkage</b>	0.15%
<b>Maximum casting thickness</b>	2 in.

## Mechanical Properties\*

	@23°C
<b>Hardness</b> ASTM D-2240	84 Shore D/1
<b>Flexural modulus</b> ASTM D-790	382,000 psi
<b>Flexural strength</b> ASTM D-790	20,000 psi
<b>Tensile modulus</b> ASTM D-638	373,000 psi
<b>Tensile strength</b> ASTM D-638	11,000 psi
<b>Elongation at break</b> ASTM D-638	10%
<b>Compressive modulus</b> ASTM D-695	269,000 psi
<b>Compressive strength</b> ASTM D-638	13,000 psi
<b>Impact strength, Unnotched Izod</b> ASTM D-256	> 7.9 ft.-lb.-f/in.2

\*Average values obtained on standardized specimens/postcured 4hrs @80°C + 16hrs @100°C. 12x1x3/16 in. rectangular bar cast into 70°C silicone mold postcured per above.

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