EPOXIES
INNOVATIVE BONDING SOLUTIONS ETC.

TECHNICAL BULLETIN

70-2170
URETHANE CASTING RESIN

DESCRIPTION:

70-2170 is a liquid, low viscosity, urethane resin formulated for casting dimensionally stable parts. Parts cast with 70-2170 have an ABS feel and appearance. 70-2170 is mercury free and does not contain TDI or MbOCA. It's low shrinkage and low viscosity allow for the production of precision parts.

This is an ideal prototyping material due to the following properties:

* High Impact Resistance
* Dimensionally Stable
* Excellent Machinability
* Fast Room Temperature Cure
* High Durometer
* Convenient Mix Ratio

TYPICAL SPECIFICATIONS:

Mix Ratio (ISO: Polyol), By weight or volume	2:1
Color	White
Viscosity, 25°C, CPS	
Polyol	1,300
ISO	100
Mixed	500
Work Life, 100 grams, minutes	10
Specific Gravity, 25°C	
Polyol	1.1
ISO	1.1
Hardness, Shore D	70
Tensile Strength, psi	7,200
Linea Shrinkage (in/in)	Not Measurable
Izod Impact Strength, Ft – lb/in	1.57
Elongation, %	6
Flexural Modulus, psi	201,000
Flexural Strength, psi	8,300
Glass Transition Temp., °C	78°C

INSTRUCTIONS FOR USE:

1) By weight or volume accurately mix 2 parts Isocyanate to 1 part Polyol.
2) Two components should be carefully measured in metal, plastic, or glass containers. Avoid using paper cups and wooden stirrers.
3) Mixed material may be degassed at 28-29 inches of mercury to remove air and ensure bubble free castings. Containers should be large enough to allow frothing.

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4) A mold release agent may be used if parts will be demolded.
5) When pouring for cast parts pour in steady stream in one spot that avoids overlapping or trapping air. Parts may be preheated to improve flow.
6) Approximate demold time:
   25°C 5 hours
   80°C 2 hours
7) Full Cure:
   25° 7 days
   80° 16 hours

STORAGE, HANDLING AND SAFETY:

Store both components at 75-85°F in original containers. If the containers are opened and the contents partially used, the material left in the container should be blanketed with dry nitrogen before sealing. The products are moisture sensitive. Carefully read Material Safety Data Sheets before using.

IMPORTANT:
The information in this brochure is based on data obtained by our research and is considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data, the results to be obtained from the use thereof, or that any such use will not infringe any patent. This information is furnished upon the condition that the person receiving it shall make his own tests to determine the suitability thereof for his particular purpose.

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