



WC-775 A/B

WATER CLEAR 75 SHORE D

POLYURETHANE CASTING SYSTEM

PRODUCT DESCRIPTION:

WC-775 A/B produces a high impact rigid 75 Shore D material that is commonly used to make clear or tinted castings of all kinds. When used at room temperature, castings $\frac{1}{8}$ " thick or larger can be readily cast. Castings that are less than $\frac{1}{8}$ " thick will generally require a mild post-cure.

PRODUCT HIGHLIGHTS:

- Exceptional clarity
- High impact resistance
- 15 - 20 minute working time
- Good weather ability, non-yellowing

PHYSICAL PROPERTIES:

Hardness, Shore D ASTM D-2240.....	75 ± 2
Density, (g/cc) ASTM D-792.....	TBD
Cubic Inches Per Pound	TBD
Color/Appearance.....	Water clear/colorless
Tensile Strength, (psi) ASTM D-638.....	TBD
Tensile Modulus, (psi) ASTM D-638.....	TBD
Elongation, (%) ASTM D-638.....	TBD
Flexural Strength, (psi) ASTM D-790.....	TBD
Flexural Modulus, (psi) ASTM D-790	TBD
Tear Strength, (pli) ASTM D-624	TBD
Shrinkage, (in./in.) linear ASTM D-2566.....	TBD
Izod Impact, notched (ft.-lb./in.) ASTM D-256	TBD

HANDLING PROPERTIES:

Mix Ratio (by weight):

Part A	95 parts by weight
Part B	100 parts by weight

Mix Ratio (by volume):

Part A	90 parts by volume
Part B	100 parts by volume

Specific Gravity:

Part A	1.08
Part B	1.03

Viscosity, (cps) @ 77°F (25°C) Brookfield:

Part A	600 ± 50
Part B	550
Mixed	600 ± 50

HANDLING PROPERTIES (continued):

Color:

Part A	Clear/colorless
Part B	Clear/colorless
Work Time, (100-gram mass) @ 77°F (25°C)	15 - 20 minutes
Demold Time @ 77°F (25°C)	16 - 24 hours
Cure Schedule.....	5 - 7 days at R.T., or 16 hours at 150° - 180°F (66° - 82°C). See <u>HEAT CURING</u> , below.

Product is sufficiently cured after one day, ambient, for general handling.

HEAT CURING:

Generally, for most applications, ambient temperature curing is adequate; however, maximum physical properties and heat resistance is obtained by post curing WC-775 for 16 hours at 140° - 160°F (60° - 71°C), or 6 - 8 hours at 180°F (82°C). Parts may require some support during heat cure. A cure schedule to minimize shrinkage and distortion would be one day at room temperature followed by 4 - 6 hours at 120° - 140°F, (49° - 60°C) and an additional 16 hours at 160° - 180°F (71° - 82°C). A cure schedule, in stages as indicated, minimizes part distortion and shrinkage, while affording maximum toughness and heat resistance.

NOTE:

The cure will be inhibited if cast against a tin catalyzed silicone RTV.

STORAGE:

Store in a cool dry place. Unopened containers will have a shelf life of 6 months from date of shipment when properly stored at room temperatures. Purge opened containers with dry nitrogen before re-sealing.

PACKAGING:

Gallon Kits.....	7.6 lbs. A, 8 lbs. B
5 Gallon Kits.....	38 lbs. A, 40 lbs. B
55 Gallon Drum Kits	380 lbs. A, 400 lbs. B

SAFETY PRECAUTIONS:

Avoid contact with skin using protective gloves and protective clothing. Repeated or prolonged contact on the skin may cause an allergic reaction. Eye protection is extremely important. Always use approved safety glasses or goggles when handling this product. Use in well-ventilated areas. Avoid breathing vapors. If exposures cannot be kept at a minimum, a respirator may be necessary in addition to ventilation. The use of a positive pressure air supplied respirator is mandatory when airborne isocyanate concentrations are "not known" or exceeds OSHA'S TWA of 0.005 ppm. Air purifying, organic cartridge type respirators are not generally recommended to use when handling this material without implementation of an end of life service program. Observe OSHA regulations for respirator use (29 CFR 1910.134). Employers are responsible for selecting the correct respirator for each situation.

IF CONTACT OCCURS:

Skin: Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. It is *not* recommended to remove resin from skin with solvents. Solvents only increase contact and dry skin. Seek qualified medical attention if allergic reactions occur.

Eyes: Immediately flush with water for at least 15 minutes. Call a physician.

Ingestion: If swallowed, call a physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel. Never give anything by mouth to an unconscious person.

Refer to the Material Safety Data Sheet before using this product.