

WC-70A A/B
WATER CLEAR SHORE 70 A
POLYURETHANE ELASTOMER



WC-70A A/B is a two-part, clear, colorless aliphatic-based polyurethane elastomer. It is recommended for use whenever a flexible, permanently transparent elastomer is required. It is UV light and oxidation resistant and can be easily tinted or pigmented to clean bright colors. This system does not contain Mercury, Phthalates, or TDI. WC-70A A/B is compatible with tin and platinum silicone mold materials.

- RoHS/REACH Compliant
- Mercury Free
- UV/Color Stable
- Tin/Platinum Silicone Safe
- Phthalate Free
- Easy to Pigment

PHYSICAL PROPERTIES	TEST METHOD	RESULTS
Hardness, Shore A	ASTM D2240-04e1	70± 5
Density (g/cc)	ASTM D792-00	1.103
Cubic Inches per Pound	N/A	26.37
Color/Appearance	Visual	Colorless/Clear
Tensile Strength (psi)	ASTM D412-98a(2002)e1	855
Tensile Modulus (psi)	ASTM D412-98a(2002)e1	1,130
Elongation (%)	ASTM D412-98a(2002)e1	125
Tear Strength (pli)	ASTM D624-00e1	45
Shrinkage (in/in) linear	ASTM D2566	0.007†
Dielectric Constant, 1 MHz	ASTM D150-87	3.797
Dissipation Factor, 1 MHz	ASTM D150-87	0.0737

***Note:** Reported physical properties are based on test specimens cured 2-3 hours at room temperature then 16 hours at 160°F (71°C).

†Shrink test specimens are cured for 24 hours at room temperature and then 16 hours at 160°F (71°C).

HANDLING PROPERTIES	Part A	Part B
Mix Ratio by weight	60	100
Mix Ratio by volume	57	100
Specific Gravity @ 77°F (25°C)	1.09	1.029
Color	Colorless	Colorless
Viscosity (cps) @ 77°F (25°C) Brookfield	175	450
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	350	
Work Time, 100g mass @ 77°F (25°C)	12 – 14 minutes	
Gel Time	16 – 18 minutes	
Demold Time @ 77°F (25°C)	6 - 8 hours	
Demold Time @ 120°F (49°C)	3 – 4 hours	

Properties above are typical and not for specifications.

CURE SCHEDULE/HEAT CURING:

WC-70A A/B is designed to be as user friendly as possible but can be more moisture sensitive compared to other BJB systems. Avoid paper products and wood stir sticks. If casting at room temperature, vacuum degassing and pressure casting is highly recommended to eliminate bubbles. When not casting under pressure, pre-heating the molds to above 100°F (38°C) can help eliminate potential moisture bubbles. WC-70A responds very well to heat curing. Demold times can be dramatically reduced by adding heat. Pre-heating the mold and curing at 120°F (49°C) allows thin walled parts to be demolded as quick as 3-4 hours while retaining the benefit of a 12-14 minute working time for proper mixing and vacuum degassing.

STORAGE AND HANDLING:

Store at ambient temperatures, 65-80°F (18-27°C). Unopened containers will have a shelf life of 6 months from date of shipment when properly stored at recommended temperatures. Purge opened containers with dry nitrogen before re-sealing.

PACKAGING	Part A	Part B	Cubic Inches per Kit
Gallon Kits	4.8 lbs.	8 lbs.	338
5-Gallon Kits	24 lbs.	40 lbs.	1,688
55-Gallon Drum Kits	270 lbs.	450 lbs.	18,986

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 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.

⚠️WARNING: This product can expose you to chemicals including Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.



Handling Guide