



ALIPHATIC & WATER CLEAR URETHANES

"Dedicated to QUALITY, SERVICE, SAFETY, and INNOVATION"

**WC-590 A/B FR
CLEAR, ALIPHATIC FIRE RETARDANT
POLYURETHANE ELASTOMER**

PRODUCT HIGHLIGHTS:

WC-590 A/B FR is a two-part, clear, 85 shore A polyurethane elastomer containing fire retardant. It is recommended for use wherever a tough, flexible, permanently transparent elastomer is required. It can be easily tinted and will retain its color provided color stable colorants are used.

WC-590 A/B FR does not contain MOCA, MDA or TDI. In addition to being an excellent castable product, it may also be used as an adhesive for bonding various plastic substrates. WC-590 A/B FR has not been tested to meet any fire resistant standards. It may meet fire resistance specifications for some applications. Users of this product need to be aware that they need to perform their own fire tests to be assured of the product's ability to work for their specific application.

PHYSICAL PROPERTIES:

Hardness, Shore A ASTM D2240	85 ± 5
Density, (g/cc) ASTM D792	1.06
Tensile Strength, (psi) ASTM D412	1,920
Elongation, (%) ASTM D412	175
Tear Strength, (pli) ASTM D624	210
Shrinkage, (in/in) linear ASTM D2566	0.003

HANDLING PROPERTIES:

Mix Ratio (by weight):	
Part A	90 parts by weight
Part B	100 parts by weight
Mix Ratio (by volume):	
Part A	91 parts by volume
Part B	100 parts by volume
Specific Gravity:	
Part A	1.07
Part B	1.08
Viscosity, (cps) @ 77°F (25°C) Brookfield:	
Part A	1,775
Part B	275
Mixed	650
Color:	
Part A	Colorless
Part B	Colorless

HANDLING PROPERTIES (continued):

Work Time, (100-gram mass) @ 77°F (25°C).....20 minutes
Gel Time25 minutes
Demold Time @ 77°F (25°C)..... 6 hours, ¼” thick; 4 hours in larger mass

CURE SCHEDULE/HEAT CURING:

Most of the physical properties can be achieved in 5-7 days at ambient temperature, 77°F (25°C). In order to achieve maximum physical properties, a post cure with heat is required. BJB recommends 24 hours at ambient temperature, 77°F (25°C), followed by 16 hours at 160°F (71°C).

NOTE:

WC-590 A/B FR has excellent weatherability and will remain clear and colorfast in exterior exposure. **The cure will be inhibited if cast against a tin catalyzed silicone RTV.**

STORAGE AND HANDLING:

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. Part B may turn hazy or partially freeze below 65°F (18°C) storage. Warming to 80° - 90°F (27° - 32°C) will return product to a clear state.

PACKAGING:

Gallon Kits..... 7.2 lbs. A, 8 lbs. B
5 Gallon Kits..... 36 lbs. A, 40 lbs. B
55 Gallon Drum Kits 360 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 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.