



GTP UltraKast 604

Description UltraKast 604 is a two component liquid castable polyurethane elastomer that contains no TDI or MOCA. The material when cured has outstanding physical properties. Exhibiting high tensile and tear strength along with exceptional abrasion resistance. It is insensitive to typical environmental moisture and exhibits low shrinkage. UltraKast 604 provides the strength and durability of a heat-cured urethane in a simple to use RTV system. It provides you with the ability to cast high strength, flexible urethane parts in urethane or silicone molds. UltraKast 604 can be colored with our RV series pigments. We recommend using black or darker colors to prevent color change or applying a UV resistant coating. This product is reddish/brown in color. Some uses for UltraKast 604 include core box liners, metal forming pads, industrial parts and abrasion resistant pads and bumpers.

Applications Service temperature range is -50° F to 200° F.

| Typical Properties | Viscosity | Specific Gravity | Weight Per Gallon |
|---------------------------|-----------|------------------|---|
| Component A | 7000 cps | 1.03 | 8.59 lb. |
| Component B | 100 cps | 1.00 | 8.36 lb. |
| Mixed | 3000 cps | 1.03 | 8.55 lb. |
| Mixing Ratio | By volume | | 4 parts A to 1 part B |
| | By weight | | 4 parts A to 1 part B |
| Work life | | | 15 minutes @ 77° F |
| Demold time | | | 16 – 24 hours @ 77° F, 2 – 4 hours @ 150° F |
| Complete cure | | | 7 days @ 77° F |

Set time and Demold depend on temperature and relative humidity

| Physical Properties | Test Method | Value |
|------------------------------|---------------|--------------|
| Hardness | ASTM 2240 | 45 Shore D |
| Tensile strength | D-412-68 | 5500 |
| Elongation | D-412-68 | 300 % |
| Tear strength | D-624 die C | 1400 |
| Shrinkage (inch) | D-2566 | 0.0015 |
| Density (A) g/cm3 (lb./gal.) | ASTM D-792-66 | 8.70 (1.044) |
| Density (B) g/cm3 (lb./gal.) | ASTM D-792-66 | 8.50 (1.02) |
| Color | | Clear |

Shelf Life UltraKast 604 is shipped from the factory in sealed containers. The containers should be stored in a cool dry area that is protected from direct sunlight and moisture. Storage temperatures should not exceed 80° F. The shelf life of factory sealed containers stored under these conditions is six months. Containers that have been opened should be resealed immediately after material has been removed in order to prevent solvent evaporation.

Packaging UltraKast 604 is available in convenient 1 -quart, 1 -gallon, 2.9 -gallon, 6.3 -gallon, 37.7 -gallon and 63 -gallon kits. UltraKast 604 has a non-hazardous rating for shipping.

Rope Coating Procedure

Description UltraKast 604 component A (resin) and component B (curative) should be warmed to 100° F before mixing to reduce viscosity and decrease mixing.

First Coat The first coat should be thinned with toluene to further reduce the viscosity and increase penetration into the outer layer of the rope. The following formulation should be used.

| Pre-mix | Ingredient | Quantity |
|----------------|--------------------------------------|-----------------|
| | UltraKast 604 component B (curative) | 100 grams |
| | Toluene | 100 grams |
| | Black pigment (special) | 20 grams |

| Then add | Ingredient | Quantity |
|-----------------|-----------------------------------|-----------------|
| | UltraKast 604 component A (resin) | 400 grams |

Mix with a flat metal spatula then transfer mix to a clean container and mix again, then apply by hand with protective latex gloves, pressing the polymer into the rope fiber.

Second Coat Wait 45 minutes then mix and apply second coat. Mix the same as first coat but with no toluene.

Third Coat Wait 45 minutes then mix and apply third coat. Mix the same as the first coat but with no toluene.

Curing Although this coating will cure at lower temperatures, better results can be obtained by curing at elevated temperatures. Wait one hour after final coat and begin elevated curing at 120° F over night or 70° F or above for three days for full cure.