



<b>DESCRIPTION</b>	TRUECAST XL-5500 is a low viscosity, urethane-molding compound specifically formulated to create a tough very durable polymer with low hardness that is especially well suited for creating wear resistant parts and surfaces.			
<b>WORKING PROPERTIES</b>	Mix Ratio By weight	100 parts A/ 48.9 part B		
	Mix Ratio By volume	100 parts A/ 50 parts B		
<b>PHYSICAL PROPERTIES</b>	Viscosity @ 72°F (A Side)	10,000 – 12,500 cps		
	Viscosity @ 72°F (B Side)	70 – 90 cps		
	Viscosity @ 72°F (Mixed)	3500 – 3700 cps		
	Color	Part A:	Clear	
	Color	Part B:	Black ( other colors available)	
	Color	Mixed:	Black	
	Working Life @ 72°F	15-20 minutes		
	Working Life @ 150°F	6-8 minutes		
	Full Cure @ 72°F	72 hours		
	Full Cure @ 150°F	18 hours		
	Specific Gravity: (Part A)	1.00		
	Specific Gravity: (Part B)	0.98		
	Specific Gravity: (Mixed)	0.99		
	Weight/Gallon Part A	8.36 lbs.		
	Weight/Gallon Part B	8.17 lbs.		
	Weight/Gallon Mixed	8.29 lbs.		
Cubic inch per lb. of product	0.0359 in <sup>3</sup>			
Hardness @ 72° F	ASTM D-2240	55-65 Shore A		
Linear Shrinkage	0.005%			
Elongation	ASTM 412 Die C	600-700%		
Tensile Strength	ASTM 412 Die C	2,000-3,000 psi		
Tear Strength	300-400 lb./in.			
Coefficients of Friction	ASTM D 1894-14	Static	1.808	
		Dynamic	1.867	
<b>MATERIAL PROCESSING</b>	<p>Component A as supplied does not require premixing. Component B should be premixed at the start of each work day to ensure even distribution of color pigment. Component A may crystallize and need to be warmed up to return to a liquid phase for processing. Once the Component A has crystallized it will need to be reheated to 120°F (8-12 hours) to melt the crystallized material. After melting, the material will remain liquid for several days at lower temperatures (i.e. 70 – 80°F) but with time, will return to a crystallized state. Normal warehouse temperatures of 70-90F are acceptable storage temperatures for this material to ensure a shelf life of 6 months. The material may be in acceptable condition after exceeding the 6 month shelf life, but will be need to be reacted (Component A with Component B) to produce samples for evaluation. Usually the hardness is the first physical property to indicate a reduction in reactivity due to prolonged shelf life, specifically softer than specification. Calibrated Shore A Hardness meters (ASTM-D-2240) can be purchased from Pacific Transducer incorporated (PTC, Inc.) 310-478-1134, Type A Meter Model# 305-L.</p> <p>Heating supply line and dispensing hoses are recommended and can be done with simple vinyl heat tape wrapped around hoses and pumps then covered in inexpensive flexible insulation, commonly used for air conditioning applications. The vinyl heat tape is available from Spray Quip Corp 713-923-2771.</p> <p>Hand mixing, carefully measure out Component A (100 parts) to Component B (48.9 parts) by Weight or 2A:1B by Volume. Use a flat metal spatula and mix for 1 minute then pour into another clean container and mix again for 1 minute then pour into mold. Using two mixing containers when mixing by hand ensures that no unmixed material will be included into the molded part. Unmixed material (part A or B) will cause weak spots in the molded part and early failure of the part.</p>			



<b>MATERIAL PROCESSING (Continued)</b>	<p>When working with plural component equipment, differential heating of components A and B is desirable to balance the viscosity for better mixing. Depending on the plural component equipment and mixing nozzles the temperature may vary. Generally component A at 140°F combined with a component B at 110°F will produce satisfactory mixing. Avoid prolonged temperatures of over 160°F for both component A and component B.</p> <p>Heated molds at 140°F will allow rapid demold and handling of the parts. Avoid prolonged temperatures of above 160°F.</p>
<b>ADHESION PROMOTION</b>	<p>To achieve a chemical bond between the new TrueCast XL-5500 and older TrueCast XL-5500, thoroughly clean the cured polymer with a generous application of MEK (Methyl Ethyl Ketone) applied to cloth towel and allow to dry 30 minutes at 72°F before applying the new TrueCast XL-5500.</p>
<b>CLEAN UP</b>	<p>Clean application equipment immediately after use with Isopropyl Alcohol (dry) or Toluene</p>
<b>STORAGE AND SHELF LIFE</b>	<p>The containers should be stored in a cool dry area that is protected from direct sunlight and moisture. Storage temperatures should not exceed 70° - 90°F. The shelf life of factory sealed containers stored under these conditions is six months.</p>
<b>SHIPPING CLASS</b>	<p>Class 55 Non-hazardous</p>
<b>COLD WEATHER FREEZING</b>	<p>The liquid component A and B can "freeze" and become solid or partially freeze forming clumps if storage temperatures fall below 50°F for more than 48 hours.</p> <p>If this occurs, use the following procedure to return the product to liquid.</p> <p>Component A &amp; B</p> <ol style="list-style-type: none"><li>1. Place the container in an oven or use warming blankets or heating belts* to maintain an even temperature between 110°F - 120°F for 1 to 2 hours. Longer times may be required for larger quantities of frozen material.</li><li>2. After warming, stir the liquid with a metal spatula to ensure that all of the material has been melted and no "clumps" remain.</li><li>3. Mix slowly with an electric drill and "jiffy" mixer.</li><li>4. Do not "whip" excess air into the liquid.</li><li>5. The mixture should be mixed such that liquid from the top and bottom of the container are included in the mixture.</li><li>6. Reseal the container to avoid contamination with the atmospheric moisture.</li></ol> <p>*Warming blankets and heat belts available from Basco <a href="https://bascousa.com">https://bascousa.com</a></p> <p>*Jiffy mixers available from Industrial Polymers Corporation.</p>