

Description

ProtoCast 100 is a low viscosity, rapid setting, and rigid urethane compound with high strength and durometer. This system will cure quickly to a hard, tough impact resistant casting. ProtoCast 100 is non-sensitive to moisture after cure and will readily bond to itself, as stage pours are required. The 1:1, by volume, mix ratio makes for easy hand or machine mix. ProtoCast 100 is recommended in applications where a "thermoplastic feel" is desired.

Application

Typical Properties

	Viscosity	Specific Gravity	Weight Per Gallon
Component A	400 cps	1.19	9.94 lb.
Component B	800 cps	1.01	8.38 lb.
Mixed	500 cps	1.10	9.17 lb.

Mixing Ratio	
By volume	100 parts A to 100 parts B
By weight	100 parts A to 84 parts B

Work life	5 minutes @ 77° F
Demold time	30-45 minutes @ 77° F
Set time and Demold depend on temperature and relative humidity	

Physical Properties

	Test Method	Value
Hardness	ASTM 2240	70 Shore D
Tensile strength	ASTM-D 638	5600
Elongation	ASTM-D 638	3.5 %
Specific gravity (cured)	ASTM D-792	1.10
Impact strength	ASTM D-256	1.5 ft. lb/in
Linear shrinkage	ASTM D-2566	.0029 in/in
Deflection temperature	ASTM D-758	135° F
Machinability		Excellent
Cubic inch per lb. of product		25.2
Compression	ASTM D-695	3,985
Thermal coefficient of expansion (on/in/F)	ASTM D-696	13.2X10
Results obtained from a 7-day room temperature cure		

Color

Light Cream

**Storage
 Shelf Life**

ProtoCast 100 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

ProtoCast 100 is available in convenient 2-quart, 2-gallon, 10-gallon and 100-gallon kits. ProtoCast 100 has a non-hazardous rating for shipping.