



# Environmentally Safe Polymers, Inc.

## Technical Data

Updated 11/2004

### **POLYCAST #16 CASTING URETHANE ELASTOMER SYSTEM**

#### **PRODUCT DESCRIPTION AND USAGE:**

PolyCast #16 is a unique moderate viscosity, low odor casting system designed for easy processing and rapid demolding. This system produces a low hardness elastomer with excellent rebound properties. PolyCast #16 has numerous application possibilities such as potting of mechanical parts to control vibration, poured in place supports for equipment, resilient furniture parts and low temperature flexible molds.

#### **COLOR:**

Both the Iso and Poly are moderate viscosity fluids. The Iso is light amber in color and the Poly is either a semi-transparent fluid or is colored to the customer's specification.

#### **PHYSICAL PROPERTIES**

##### **TENSILE:**

ASTM D-412  
Strength: 900 psi  
Elongation: 400%  
Permanent Set: 5% maximum

##### **HARDNESS:**

ASTM D-2240 Shore A 55-60

##### **TEAR RESISTANCE:**

ASTM D-624 Die C 150 pli

##### **SHRINKAGE:**

0.5% - 1.0%  
Depending upon cure temperature.

##### **ABRASION RESISTANCE:**

Excellent.

#### **LIQUID PROPERTIES**

##### **SOLIDS:**

Weight: 100%  
Volume: 100%

##### **VISCOSITY:**

Poly Component: 975 ± 25 cps @ 77°F.  
Iso Component: 50-100 cps @ 77°F.

##### **DENSITY:**

Poly Component: 8.3-9.1 lbs./gal. (S.G. 1.03-1.09)  
Depending on color.

Iso Component: 9.14 lbs./gal. (S.G. 1.10)

##### **V.O.C.:**

Contains No Volatile Organic Compounds.

##### **FLASH POINT:**

ASTM D-56 (TCC) Greater than 200°F.

##### **STORAGE STABILITY:**

One year in unopened containers at 50-90°F.

#### **APPLICATION**

##### **MIXING:**

The above liquid component properties are for the standard product of 2.87 to 1 volume mixing. Hand mix thoroughly for 30 seconds. Power mixing is mandatory for larger quantities (over ½ gallon).

##### **POT LIFE:**

Pot life is 4-7 minutes at room temperature. When gelation occurs, the clear mixture forms a translucent, white rubbery, compound.

##### **CURE & DEMOLD:**

PolyCast #16 will be slightly tacky for some time however, it can be demolded in approximately 3 times the pot life. Thin films applied to cold surfaces may require up to 4 hours to cure to a removable film strength. A faster curing product is available to meet needs for quicker cycling of molds. The material will reach maximum physical properties in 3 to 10 days.

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