



# Epoxy Resin Physical Properties and Chemical Resistance

Choose high performance Epoxy Products work surfaces for outstanding durability

Epoxy manufactures quality epoxy resin components and work surfaces. The impressive heat and chemical resistance of epoxy resin makes it the most popular choice for the rigors of a laboratory.

The outstanding qualities of epoxy resin make it the safest, most economical and long-lasting work surfaces available.

## Physical Properties Test Results (All units are PSI unless otherwise noted)

Tensile Strength	ASTM D638	11,151
Flexural Strength	ASTM D790	17,171
Flexural Modulus	ASTM D790	2.13 X 10 <sup>6</sup>
Compressive Strength	ASTM D695	36,102
Density	ASTM D 792	2.055 g/cc
Water Absorption	ASTM D570	+0.019%
Heat Deflection	ASTM D648	342°F
Rockwell M Hardness	ASTM D785	109
Coefficient of Thermal Expansion	ASTM E831	1.68 X 10 <sup>-5</sup>



*Note: Testing by SGS U.S. Testing Co.,Inc. and IMR Test Labs in January*

2008

### **Heat Resistance**

The top showed no blistering or cracking when an overturned 3/8" (9.525mm) Bunsen burner, adjusted to a quiet flame with a 1.5" (38 mm) inner core, was allowed to remain on the surface for two minutes.

### **Char Resistance**

A high form porcelain crucible, size 15 ml, was heated over a Bunsen burner to a dull red heat. Immediately the hot crucible was placed on the top surface and allowed to cool to room temperature. Upon removal, there were no blisters, cracks, or breakdown of the surface.

### **Fire Resistance**

Using ASTM D635 test procedure for determining the burning characteristics, Epoxy shows no burn rate and is considered self extinguishing.

### **Durable Epoxy work surfaces resist heat and chemicals**

Epoxy designs and manufactures work surfaces and components to the highest standards of the industry. Extensive testing shows Epoxy surfaces resist discoloration, blistering, and cracking even under the harshest conditions. This extreme high chemical and heat resistance means Epoxy work surface components will appear new even after years of hard work.

The rich color and chemical resistance quality permeates the entire Epoxy work surface consistently without depending on surface coating for protection or use.

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