

# LOCTITE STYCAST EE 0182/EB 6025

September 2013

## PRODUCT DESCRIPTION

LOCTITE STYCAST EE 0182/EB 6025 provides the following product characteristics:

<b>Technology</b>	Epoxy
Appearance, Resin (Component A)	White
Appearance, Hardener (Component B)	Amber
Appearance (cured)	White
Components	Two components - requires mixing
Mixing Ratio, by volume Component A: Component B	100 : 38.5
Mixing Ratio, by weight Component A: Component B	100 : 24
<b>Cure</b>	Heat cure
<b>Application</b>	Encapsulant

LOCTITE STYCAST EE 0182/EB 6025 is a two part, white epoxy casting system with low abrasion and rapid gel properties.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

### Component A Properties *EE0182*

Solids Content, %	100
Filler Content, %	56.5
Density @ 25°C, gm/cc	1.71
Viscosity, Brookfield - RVF, 25 °C, mPa·s (cP):	
Spindle 5, speed 20 rpm	15,000
Shelf Life @ 25°C (from date of manufacture), year	1
Flash Point - See SDS	

### Component B Properties *EB6025*

Solids Content, %	100
Filler Content, %	0
Density @ 25°C, gm/cc	0.95
Viscosity, Brookfield - RVF, 25 °C, mPa·s (cP):	
Spindle 2, speed 20 rpm	400
Shelf Life @ 25°C (from date of manufacture), year	1
Flash Point - See SDS	

## Mixed Properties

Viscosity @ 25 °C, mPa·s (cP):	
Spindle 4, speed 20 rpm	3,170
Gel Time @ 85°C, minutes	5
Pot Life @ 25°C, 200 gm mass, hours	4
Flash Point - See SDS	

## TYPICAL CURING PERFORMANCE

### Recommended Cure Schedule

2 hours @ 60°C

### Alternate Cure Schedule

1 hour @ 85°C

The above cure profile is a guideline recommendation. Cure conditions (time and temperature) may vary based on customers' experience and their application requirements, as well as customer curing equipment, oven loading and actual oven temperatures.

## TYPICAL PROPERTIES OF CURED MATERIAL

### Physical Properties

Coefficient of Linear Thermal Expansion, ppm/°C:	
Below Tg	71
Above Tg	162
Glass Transition Temperature (Tg), °C	43.5
Hardness, Shore D	80
Linear Shrinkage, %	0.38
Elongation, %	31
Thermal Conductivity, W/(m·K)	0.41

### Electrical Properties

Dielectric Constant / Dissipation Factor @ 25°C:	
1 kHz	1.85 / 0.026
Volume Resistivity @ 25°C, ohm-cm	3.3×10 <sup>14</sup>
Surface Resistivity @ 25°C, ohms	3.2×10 <sup>15</sup>

## TYPICAL PERFORMANCE OF CURED MATERIAL

### Miscellaneous

Tensile Strength	N/mm <sup>2</sup>	9.8
	(psi)	(1,420)

## GENERAL INFORMATION

For safe handling information on this product, consult the Safety Data Sheet, (SDS).

### Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

## STORAGE:

**Liquid Storage - Liquids should be stored at 25°C or below, in closed containers. If stored below 25°C, the material MUST be allowed to come to room temperature, in the sealed container, to avoid moisture contamination.**

#### **Optimal Storage : 25 °C**

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative

#### **Conversions**

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$

$\text{kV/mm} \times 25.4 = \text{V/mil}$

$\text{mm} / 25.4 = \text{inches}$

$\text{N} \times 0.225 = \text{lb}$

$\text{N/mm} \times 5.71 = \text{lb/in}$

$\text{psi} \times 145 = \text{N/mm}^2$

$\text{MPa} = \text{N/mm}^2$

$\text{N} \cdot \text{m} \times 8.851 = \text{lb} \cdot \text{in}$

$\text{N} \cdot \text{m} \times 0.738 = \text{lb} \cdot \text{ft}$

$\text{N} \cdot \text{mm} \times 0.142 = \text{oz} \cdot \text{in}$

$\text{mPa} \cdot \text{s} = \text{cP}$

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##### **Note:**

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#### Reference 1