

# LOCTITE STYCAST ES 2500

November 2016

**PRODUCT DESCRIPTION**

LOCTITE STYCAST ES 2500 provides the following product characteristics:

<b>Technology</b>	Epoxy
Appearance, Resin (Component A)	Black
Appearance, Hardener (Component B)	Amber - green
Appearance (Mixture)	Black
Components	Two components - requires mixing
Mix Ratio, by volume - Part A: Part B	2 : 1
Mixing Ratio, by weight Component A: Component B	100 : 29.5
<b>Cure</b>	Room temperature cure
<b>Application</b>	Potting and Encapsulating

LOCTITE STYCAST ES 2500 is a resilient, low cost, fast gelling, potting compound. Designed for easy 2 to 1 meter-mix-dispense machinery and low abrasion. This material is ideal for potting and encapsulating high volume parts.

LOCTITE STYCAST ES 2500 meets UL 94 HB Flame Retardant to 1.5mm thickness.

**TYPICAL PROPERTIES OF UNCURED MATERIAL****Part A Properties**

Density, @ 25 °C, g/cm <sup>3</sup>	1.63
Viscosity @ 25 °C, cP	11,000

**Part B Properties**

Density, @ 25 °C, g/cm <sup>3</sup>	0.97
Viscosity @ 25 °C, cP	170

**Mixed Properties**

Density, @ 25 °C, g/cm <sup>3</sup>	1.41
Viscosity @ 25 °C, cP	1,500
Pot Life @ 25 °C, minutes:	
400 g mass	10
Gel Time @ 25 °C, minutes:	
400 g mass	25

**TYPICAL CURING PERFORMANCE****Recommended Curing Conditions**

- 16 hours @ 25 °C (Recommended cure)
- 2 hours @ 66 °C (Alternate cure)

**TYPICAL PROPERTIES OF CURED MATERIAL****Physical Properties :**

Glass Transition Temperature, °C	23
Coefficient of Thermal Expansion, ppm/°C:	
Pre Tg (Alpha 1)	58
Post Tg (Alpha 2)	169
Thermal Conductivity, W/(m-K)	0.288
Shore Hardness, Durometer D	70
24 Hour Water Moisture Absorption, %	0.3
Tensile Strength, psi	1,300
Exotherm Temp, 300 grams @ °C	102

**Electrical Properties:**

Dielectric Strength, 10 mil thickness, volts/mil	410
Arc Resistance, seconds	87
Volume Resistivity, ohm-cm	1.5×10 <sup>14</sup>
Dielectric Constant / Dissipation Factor @ 25°C:	
100 Hz	4.2 / 0.08
1 kHz	4.0 / 0.04
100 kHz	3.7 / 0.03

**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.

**Note:** Before using this product please purge approximately 30 ml. of material prior to application. Discard purged material in accordance with the Material Safety Data Sheet. A video instruction is available upon request.

**STORAGE:**

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

**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.**

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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Americas  
+1.888.943.6535

Europe  
+32.1457.5611

Asia  
+86.21.3898.4800

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