

# LOCTITE STYCAST US 2350

September 2015

## PRODUCT DESCRIPTION

LOCTITE STYCAST US 2350 provides the following product characteristics:

<b>Technology</b>	Urethane
Appearance - Part A	Brown
Appearance - Part B	Black
Appearance (cured)	Black
Components	Two component - requires mixing
Mix Ratio, by volume - Part A: Part B	1 : 4
Mixing Ratio, by weight Component A: Component B	21.2 : 100
<b>Cure</b>	Room temperature cure
<b>Application</b>	Potting and Encapsulating

LOCTITE STYCAST US 2350 is a flexible, flame retardant, mineral filled, polyurethane compound. This potting compound has long pot life, and is low viscosity so it flows well and adheres to many substrates. It has very low odor and does not contain TDI or mercury compounds.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

### Part A Properties

Density, @ 23 °C, g/cm <sup>3</sup>	1.24
Viscosity, Brookfield - RVF, cP: Spindle 2, speed 20 rpm	55

### Part B Properties

Density, @ 23 °C, g/cm <sup>3</sup>	1.46
Viscosity, Brookfield - RVF, cP: Spindle 5, speed 20 rpm	13,000

### Mixed Properties

Viscosity, Brookfield - RVF, 23 °C, mPa·s (cP): Spindle 2, speed 20 rpm	2,400
Work Life @ 25 °C, 300 gram mass, minutes	45

## TYPICAL CURING PERFORMANCE

### Gel Time

Gel @ 23°C, 300 gram mass, minutes	90
Techne Gel, 140 gram mass, minutes	103

### Recommended Curing Conditions

12 to 24 hours @ 23 °C

### Alternate Cure Schedule

1 to 3 hours @ 65 to 85°C

The above cure profiles are guideline recommendations. 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

Density, 23 °C, g/cm <sup>3</sup>	1.4
Shore Hardness, , Durometer A	85
Coefficient of Thermal Conductivity, W/(m-K)	0.51
Linear Shrinkage, %	0.85
24 Hour Water Moisture Absorption, %	0.09
Weight Loss after 168hrs @ 125°C, %	0.19
Tensile Strength, psi	476
Tensile Strength, N/mm <sup>2</sup>	3.28
Flammability, 6.1mm, 94V-2	Passes
Flammability, 9.53mm, 94V-0 (UL File# E66708)	Passes

### Electrical Properties

Dielectric Strength, 20 mil thickness, volts/mil	954
Surface Resistivity, ohms @ 25°C	1.54×10 <sup>15</sup>
Volume Resistivity, ohm-cm	6.12×10 <sup>13</sup>
Dielectric Constant / Dissipation Factor @ 25°C:	
100 Hz	6.14 / 0.178
1 kHz	5.06 / 0.132
100 kHz	4.09 / 0.042

## GENERAL INFORMATION

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

### Directions for use

- LOCTITE STYCAST US 2350 will settle upon storage, especially at temperatures exceeding 27 °C. Refrigerated storage will minimize filler settling. Each container must be thoroughly mixed before combining Part A and Part B. For ease of mixing, store containers upside down. After warming to room temperature, approximately 10 minutes on a standard paint shaker will normally ensure complete dispersion of the filler.

### 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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**Reference 1.2**