



# LOCTITE STYCAST 2850FT BL

June 2018

## PRODUCT DESCRIPTION

LOCTITE STYCAST 2850FT BL provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Appearance (Resin)</b>	blue
<b>Components</b>	Two components - requires mixing
<b>Mix Ratio, by weight - Material:Catalyst</b>	100 : 4.5
<b>Product Benefits</b>	<ul style="list-style-type: none"> <li>• High thermal conductivity</li> <li>• Low thermal expansion</li> <li>• Low CTE</li> <li>• Electrically Insulating</li> <li>• Excellent chemical and solvent resistance</li> <li>• Excellent thermal and mechanical shock resistance</li> </ul>
<b>Cure</b>	Heat cure
<b>Application</b>	Encapsulant
<b>Typical Applications</b>	High voltage applications e.g., Power supplies, Transformers, Bushings, Insulators

LOCTITE STYCAST 2850FT BL epoxy is designed for applications where electrical insulation and mechanical protection must be maintained while coping with heat transfer considerations.

LOCTITE STYCAST 2850FT BL can be used with a variety of catalysts. For more information on mixed properties when used with other available catalysts, please contact your local technical service representative for assistance and recommendations.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

### Part A Properties 2850FT BL

Viscosity @ 25 °C, mPa·s (cP)	250,000
Density, g/cm <sup>3</sup>	2.43
Shelf Life @ 18 to 25°C, year	1
Flash Point - See SDS	

### Part B Properties CAT 11

Pot life, 4.5 kg mass, hours	4
Flash Point - See SDS	

## TYPICAL CURING PERFORMANCE

### Cure Schedule

16 hours @ 80°C
2 hours @ 100°C
1 hour @ 125°C

### Post Cure

4 hours @ 150°C
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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

Shore Hardness, , Shore D	95
Coefficient of Linear Thermal Expansion, 10 <sup>-6</sup> K <sup>-1</sup>	32
Glass Transition Temperature (T <sub>g</sub> ), °C	105
Thermal Conductivity, W/(m·K)	1.38
Flexural Modulus, MPa	1.4×10 <sup>4</sup>
Flexural Strength, MPa	85

## GENERAL INFORMATION

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

## DIRECTIONS FOR USE

1. Certain resins and hardeners are prone to crystallization. If crystallization does occur, warm the contents of the shipping container to 50 to 60°C until all crystals have dissolved. Shipping container must be loosely covered during the warming stage to prevent any pressure build-up.
2. Mix material thoroughly in the original container prior to removal. Mechanical mixing is preferred.
3. MOLD RELEASE 122S will prevent adhesion to molds.
4. When necessary, entrapped air can be removed by vacuum deairing.
5. STYCAST 2850FT-BLUU may be heated at any temperature up to 75°C before catalyst addition to lower viscosity and aid pourability.
6. Pour mixture into cavity or mold.

## STORAGE:

Store in original, tightly covered containers in clean, dry areas. Storage information may be indicated on the product container labeling.

### Optimal Storage : 18 to 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.

## 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.



**Conversions**

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

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

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

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

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

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

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

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

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

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

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

**Disclaimer****Note:**

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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