

# STYCAST 2850 FT 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	

### CAT 9

Viscosity @ 25 °C, mPa·s (cP)	92
Density, g/cm <sup>3</sup>	1.0
Flash Point - See SDS	

## TYPICAL CURING PERFORMANCE

### Cure Schedule

#### STYCAST 2850FT Blue with

#### CAT 9

- 16 to 24 hours @ 25°C
- 4 to 6 hours @ 45°C
- 1 to 2 hours @ 65°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

Shore Hardness, , Shore D	95
Coefficient of Linear Thermal Expansion, 10 <sup>-6</sup> K <sup>-1</sup>	32
Glass Transition Temperature (Tg), °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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

**In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:**

In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

**In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:**

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. 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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

**In case products are delivered by Henkel Corporation, Resin Technology Group, Inc., or Henkel Canada Corporation, the following disclaimer is applicable:**

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

**Trademark usage:** [Except as otherwise noted] All trademarks in this document are trademarks and/or registered trademarks of Henkel and its affiliates in the U.S. and elsewhere.

Reference 0.3

<p>Supplied by:  <a href="http://www.hitek-ltd.co.uk">www.hitek-ltd.co.uk</a>  +44 (0)1724 851678</p>		<p><b>HITEK</b>  ELECTRONIC MATERIALS LTD</p>
---	---	---

Americas  
+1.888.943.6535

Europe  
+32.1457.5611

Asia  
+86.21.3898.4800

**For the most direct access to local sales and technical support visit: [www.henkel.com/electronics](http://www.henkel.com/electronics)**