

LOCTITE STYCAST ES 1901

September 2012

PRODUCT DESCRIPTION

LOCTITE STYCAST ES 1901 provides the following product characteristics:

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|--|---------------------------------|
| Technology | Epoxy |
| Appearance (cured) | clear |
| Components | Two component - requires mixing |
| Mix Ratio, by volume - Part A: Part B | 1 : 1 |
| Mixing Ratio, by weight Component A: Component B | 100 : 105 |
| Cure | Room temperature cure |
| Application | Potting and Encapsulating |

LOCTITE STYCAST ES 1901 is a fast-setting, toughened, medium-viscosity, industrial grade epoxy adhesive. Once mixed, the two-component epoxy cures at room temperature with low shrinkage and forms an ultra clear bondline with excellent peel resistance. When fully cured, the epoxy is resistant to a wide range of chemicals and solvents, and acts as an excellent electrical insulator. LOCTITE STYCAST ES 1901 is ideal for bonding plastic, metal, glass, wood, ceramic, rubber, and masonry materials where flexibility is needed. Designed for a variety of applications such as flex circuits, cable boots, and staking fillet bonds. This material is well suited for applications that require an ultraclear bondline.

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

| | |
|-------------------------|-------|
| Specific Gravity @ 25°C | 1.1 |
| Viscosity @ °C, cps | 1,900 |
| Flash Point, °C | >93 |

Part B Properties

| | |
|-------------------------|-------|
| Specific Gravity @ 25°C | 1.15 |
| Viscosity @ °C, cps | 2,800 |
| Flash Point, °C | >93 |

Mixed Properties

| | |
|---------------------------------------|----------|
| Specific Gravity @ 25°C | 1.13 |
| Viscosity @ 25°C, cPs | 2,400 |
| Gel Time, 50 gm mass @ 25 °C, minutes | 3 |
| Tack free time, minutes | 3.5 to 4 |

Recommended Curing Conditions

24 hours @ 25 °C (Recommended cure)

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

| | |
|----------------------------------|-----|
| Shore Hardness , Durometer D | 55 |
| Glass Transition Temperature, °C | 10 |
| Tensile Strength, psi | 270 |
| Tensile Elongation, % | 80 |

Electrical Properties:

| | |
|--------------------------------|-----|
| Dielectric Strength, volts/mil | 400 |
|--------------------------------|-----|

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.

Optimal Storage: 20 °C to 30 °C. Storage below 20 °C or greater than 30 °C can adversely affect product properties.

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

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{psi} \times 145 = \text{N/mm}^2$
 $\text{MPa} = \text{N/mm}^2$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

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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