

LOCTITE STYCAST 276

September 2013

PRODUCT DESCRIPTION

LOCTITE STYCAST 276 provides the following product characteristics:

Technology	Epoxy
Appearance	Black
Components	Two components - requires mixing
Mix Ratio, by weight - Material:Catalyst	100 : 10
Solids Content, %	100
Product Benefits	• Non-sag • Low cure shrinkage • High thermal conductivity • High temperature resistance
Cure	Heat cure
Application	Encapsulant
Key Substrates	Brass, Copper, Aluminum, Glass, Ceramics and Most plastics

LOCTITE STYCAST 276 epoxy is formulated not to sag or run during cure when applied on loose fitting parts set on vertical or overhead surfaces. It is designed to perform well on porous or non-porous surfaces. LOCTITE STYCAST 276 can be exposed to temperatures as high as 260°C.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Mixed Properties

Shelf Life @ 25 °C (from date of manufacture) months	6
Pot Life @ 25 °C, hours	24
Flash Point - See MSDS	

TYPICAL CURING PERFORMANCE

Cure Schedule

- 8 hours @ 120°C
- 6 hours @ 150°C
- 3 hours @ 180°C
- 2 hours @ 200°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

Coefficient of Thermal Expansion , ASTM D696, ppm/°C	27
Thermal Conductivity, ASTM D-2214, W/(m-K)	1.3

Electrical Properties

Volume Resistivity, ASTM D257, ohm-cm	1×10 ¹⁵
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TYPICAL PERFORMANCE OF CURED MATERIAL

Flexural Strength, ASTM D1184	N/mm ²	115
	(psi)	(16,680)
Tensile Shear Strength, ASTM D1002:		
@ 24°C	N/mm ²	18
	(psi)	(2,610)
@ 149°C	N/mm ²	14
	(psi)	(2,030)

GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. Complete cleaning of the substrates should be performed to remove contamination such as oil, grease, scale, mold release and loose foreign matter. Vinyl surfaces should be cleaned by wiping with clean cloth saturated with methyl ethyl ketone.
2. Apply adhesive to all surfaces to be bonded and join together.
3. In most applications only contact pressure is required.

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.

Storage

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

Optimal Storage : 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.

Conversions

(°C x 1.8) + 32 = °F
 kV/mm x 25.4 = V/mil
 mm / 25.4 = inches
 N x 0.225 = lb
 N/mm x 5.71 = lb/in
 N/mm² x 145 = psi
 MPa = N/mm²
 MPa x 145 = psi
 N·m x 8.851 = lb·in
 N·m x 0.738 = lb·ft
 N·mm x 0.142 = oz·in
 mPa·s = cP

Disclaimer

Note:

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Reference 0.1