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LOCTITE

Technical Data Sheet

LOCTITE STYCAST 1265

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PRODUCT DESCRIPTION

LOCTITE STYCAST 1265 provides the following product characteristics:

Technology	Epoxy
Technology (Part B)	Amine
Components	Two component - requires mixing
Appearance, Resin (Part A)	Clear
Appearance, Hardener (Part B)	Clear
Mix Ratio, by weight - Part A: Part B	100 : 100
Product Benefits	• Good toughness • Long pot life • Low exotherm • Soft gel • Non-conductive
Cure	Room temperature and Heat cure
Application	Encapsulant
Operating Temperature	-40 to 90ºC

LOCTITE STYCAST 1265 is designed for embedding stress sensitive components or where inspections and repairs are desired. LOCTITE STYCAST 1265 epoxy encapsulant is designed to have excellent adhesion to a wide variety of substrates. It can be cut easily for repairing and replacing components. Fresh material can be poured and then cured to form a perfect repair.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Part A Properties

Viscosity, Brookfield , 25 °C, mPa·s (cP)	10,000
Density, g/cm³	1.21
Shelf Life @ 25°C, days	365
Flash Point - See SDS	

Part B Properties

Viscosity, Brookfield , 25 °C, mPa·s (cP)	230
Density, g/cm³	0.98
Shelf Life @ 25°C, days	365

Mixed Properties

Viscosity, Brookfield , 25 °C, mPa·s (cP)	600
Density, g/cm³	1.08
Work Life (100 g mass) @ 25 °C, hours	>24

TYPICAL CURING PERFORMANCE

Cure Schedule

3 to 7 days @ 25°C
48 hours @ 45°C
16 hours @ 65°C
4 hours @ 95°C

Cure at any one of the recommended cure schedules. For large castings, use the lower temperature cures.

Cured hardness is somewhat dependent on cure temperature. Lower temperatures generally result in a softer material.

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

Hardness, Shore A	25

Electrical Properties

Volume Resistivity @ 25ºC, ohm-cm	10^{12}
Dielectric Constant @ 1mHz	3.0
Dissipation Factor @ 1mHz	0.02

GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. Complete cleaning of the substrates should be performed to remove contamination such as oxide layers, dust, moisture, salt and oils which can cause poor adhesion or corrosion in a bonded part.
2. Accurately weigh resin and hardener into a clean container in the recommended ratio. Weighing apparatus having an accuracy in proportion to the amounts being weighed should be used.
3. Blend components by hand, using a kneading motion, for 2 to 3 minutes and scrape the bottom and sides of the mixing container frequently to produce a uniform mixture.
4. If possible, power mix for an additional 2 to 3 minutes. Avoid high mixing speeds. This can entrap excessive amounts of air. It can also cause overheating of the mixture, resulting in reduced working life.
5. To ensure a void-free embedment, vacuum deairing should be used to remove any entrapped air introduced during the mixing operation.
6. Pump-down or pull vacuum on the mixture to achieve an ultimate vacuum or absolute pressure of 1 to 5 torr or mm Hg. The foam will rise several times in the liquid height and then subside.
7. Continue vacuum deairing until most of the bubbling has ceased. This usually takes 3 to 10 minutes.
8. Pour mixture into cavity or mold.
9. Gentle warming of the mold or assembly reduces the viscosity. This improves the flow of the material into the unit having intricate shapes or tightly packed coils or components.
10. Further vacuum deairing in the mold may be required for critical applications.

Not for product specifications

The technical data contained herein are intended as reference only.

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Please contact your local quality department for assistance and recommendations on specifications for this product.

STORAGE:

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

Optimal Storage: 25°C. Storage below 25°C or greater than 25°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

(°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
psi x 145 = N/mm²
MPa = N/mm²
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:

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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