Technical Data Sheet

LOCTITE STYCAST 1266

December 2016

PRODUCT DESCRIPTION

LOCTITE STYCAST 1266 provides the following product characteristics:

Technology	Epoxy
Technology (Part B)	Amine
Appearance,Resin (Component A)	Clear amber liquid
Appearance, Hardener (Component B)	Clear yellow liquid
Components	Two components - requires mixing
Mixing Ratio, by weight Component A: Component B	100 : 28
Mixing Ratio, by volume Component A: Component B	100 : 33
Product Benefits	• Optical clarity • Low viscosity • High impact strength • Room temperature cure capability • Good moisture resistance • Good electrical properties
Cure	Room Temperature or Heat Cure
Application	Assembly
Operating Temperature	-65 to 105ºC
Substrates	Metals, Glass, Plastics

LOCTITE STYCAST 1266 is a low viscosity material, making it suitable for impregnating applications with small tolerances.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Part A Properties :

Brookfield Viscosity , ASTM D2393 cP	8,500
DensityASTM D792, g/cm³	1.16
Flash Point - See SDS	

Part B Properties :

Brookfield Viscosity ASTM D2393 cP	35
DensityASTM D792, g/cm³	1.0
Flash Point - See SDS	

Mixed Properties :

Working Time, 100 g mass @ 25°C, minutes	30
Density, ASTM D792, g/cm³	1.12
Brookfield Viscosity , ASTM D2393 cP	650

TYPICAL CURING PERFORMANCE

Cure Schedule

1 to 2 hours @ 65°C
8 to 16 hours @ 25°C

Cure at any one of the recommended cure schedules.

For optimum performance, follow the initial cure with a post cure of 2 hours at 100 ºC.

Alternate cure schedules may also be possible. Contact your Henkel representative for further information.

This product generates moderate heat during cure. No adverse exotherm effects are obtained when cured at 65ºC in masses up to approximately 100 grams.

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 D, ASTM D2240	75

Electrical Properties:

Dielectric Strength , ASTM D149, kV/mm	15.7
Dielectric Constant / Dissipation Factor, ASTM D150: @ 60Hz	3.0/0.02
Volume Resistivity @ 25 °C, ASTM D257, ohm-cm	1×10^{15}

TYPICAL PERFORMANCE OF CURED MATERIAL

Flexural strength , ASTM D790:
N/mm² 138
(psi) (20,000)

Compressive Strength , ASTM-D695:
N/mm² 69
(psi) (10,000)

Tensile Strength, ASTM D412:
N/mm² 41
(psi) (6,000)

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. 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. Vacuum deair mixture at 1 to 5 mm mercury. The foam will rise several times 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.
11. Certain resins and hardeners are prone to crystallization. If crystallization does occur, warm the contents of the shipping container to 50 to 60ºC until all crystals have dissolved. Shipping container must be loosely covered during the warming stage to prevent any pressure build-up.
12. Allow contents to cool to room temperature before continuing.

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 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/F
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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Reference 2

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