

LOCTITE STYCAST PC 28-STD

March 2016

PRODUCT DESCRIPTION

LOCTITE STYCAST PC 28-STD provides the following product characteristics:

Technology	Urethane
Appearance	Gardener 12
Product Benefits	<ul style="list-style-type: none"> One component Room temperature cure Solvent resistant Superior toughness and abrasion resistance Easily removable with soldering iron or suitable solvent No cracking or crazing with vibration Fluorescent under UV light
Cure	Air dry and Room temperature cure
Application	Conformal coating
Dried Film Thickness	0.0015 to 0.004
Application Method	Brush, spray or dip

LOCTITE STYCAST PC 28-STD solvent-based, urethane conformal coating is designed for printed circuit board protection applications. Unlike similar coatings, which rely on moisture in the air for curing, LOCTITE STYCAST PC 28-STD is an oxygen curing type. Components and joints may be repaired by heating the coating with a soldering iron for easy removal.

TYPICAL PROPERTIES OF UNDRIED MATERIAL

Viscosity, Brookfield - RVF, 25 °C, mPa·s (cP):	
Spindle 2, speed 20 rpm	35
Solids Content by Weight, %	35
Shelf Life @ 8 to 28°C (from date of manufacture), :	
Unopened, months	18
Aerosol, months	24
Flash Point - See SDS	

TYPICAL DRYING PERFORMANCE

Recommended Drying Condition

2 to 4 hours @ 60°C

Alternative Drying Condition

24 hours @ 25°C

Tack Free Time

Tack Free Time 1 to 4 hours

For optimum performance, boards should be air dried at least 30 to 60 minutes @ 25°C to remove solvents before final oven drying (or before applying additional coats).

The above drying profile is a guideline recommendation. Conditions (time and temperature) may vary based on customers' experience and their application requirements, as well as customer drying equipment.

TYPICAL PROPERTIES OF DRIED MATERIAL

Physical Properties

Appearance of Film (after thermal and moisture resistance testing):

Blistering	None
Wrinkling	None
Cracking	None
Peeling	None
Discoloration	None

Flexibility:

Cracking over 0.125 inch diameter mandrel	None
---	------

Electrical Properties

Dielectric Withstand at 1,500 volts, 60Hz:

Flash over or breakdown before or after thermal shock and moisture exposure	None
---	------

Leakage Rate:

Before and after thermal shock and moisture exposure, microamperes	<10
--	-----

Insulation Resistance :

Before moisture exposure, megohms	>1,500,000
After moisture exposure, megohms	>5,000

TYPICAL ENVIRONMENTAL RESISTANCE

Fungus Resistance per ASTM G21	Non nutrient
--------------------------------	--------------

GENERAL INFORMATION

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

DIRECTIONS FOR USE

Printed circuits or other objects to be coating should be cleaned in accordance with accepted industry practices. Isopropyl alcohol, P.C. freon or methyl ethyl ketone have been found satisfactory as cleaning agents.

Application:

- Applications should be performed in a well-ventilated area.
- If sprayed, the spray should be tested on a scrap surface to determine proper distance. If held too close, the coating will bubble and run. If held too far away, the coating will be thin, spotty and dry. In most instances, several light coats will work out better than one heavy coat.

Viscosity:

- Viscosity may be reduced when desired with LOCTITE STYCAST AC 0305 thinner.
- Other solvents such as methoxy propyl acetate, methyl ethyl ketone, xylene and toluene can be used alone or as a mixture depending on how coating will be applied and drying time desired.
- The evaporation rate of some recommended solvents, starting with the fastest, are as follows: methyl ethyl ketone – toluene – xylene – LOCTITE STYCAST AC 0305 – methoxy propyl acetate.
- Dilutions of 15 to 20 % will generally be sufficient for most

applications.

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 is indicated on the product container labeling.

Optimal Storage : 8 to 28 °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

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$

$\text{kV/mm} \times 25.4 = \text{V/mil}$

$\text{mm} / 25.4 = \text{inches}$

$\text{N} \times 0.225 = \text{lb}$

$\text{N/mm} \times 5.71 = \text{lb/in}$

$\text{psi} \times 145 = \text{N/mm}^2$

$\text{MPa} = \text{N/mm}^2$

$\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$

$\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$

$\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$

$\text{mPa}\cdot\text{s} = \text{cP}$

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

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 of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 1

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