

# **LOCTITE STYCAST PC 62**

September 2014

### PRODUCT DESCRIPTION

LOCTITE STYCAST PC 62 provides the following product characteristics:

Technology	Acrylic
Appearance	Colorless
Components	One
Product Benefits	<ul> <li>Fluorescent under UV light</li> <li>Provides environmental and mechanical protection</li> <li>Toluene-free alternative</li> <li>Superior toughness and abrasion resistance</li> <li>Easily removable with soldering iron or suitable solvent</li> </ul>
Solids Content, %	23 to 26
Cure	Air dry
Application	Conformal coating
Operating Temperature - Continuous	-40 to 125°C
Typical Assembly Applications	Printed circuit board

LOCTITE STYCAST PC 62 conformal coating is a rapid drying acrylic for circuit board protection applications.

## TYPICAL PROPERTIES OF UNDRIED MATERIAL

Viscosity, Brookfield - LV, 25 °C, cps:		
Spindle 1, speed 30 rpm,	52	
Specific Gravity @ 25°C	0.82	
Tack Free Time:		
~25°C/~35% RH (120µm wet film), minutes	<5	
Flash Point - See SDS		

#### **TYPICAL DRYING PERFORMANCE**

# **Recommended Drying Conditions**

24 hours @ 25°C

# **Alternative Drying Conditions**

45 minutes @ 75°C

Drying of the coating depends upon solvent evaporation. For optimum performance, boards should be dried at least 30 minutes at 25°C to remove solvents before final drying in oven (or before applying additional coats).

Drying temperatures higher than recommended could cause formation of bubbles if bulk solvent is not allowed to evaporate before placing in oven. Optimization of the drying schedule may be possible to reduce the times stated above. Ultimately, drying times will depend on film thickness and circuit board design. It is therefore imperative to verify the drying schedule for each applications. Deaeration is not suggested due to a risk of solvent loss.

## TYPICAL PROPERTIES OF DRIED MATERIAL

#### **Physical Properties**

Film Thickness (Adjustable), µm 25 to 100

#### **Electrical Properties**

Insulation Resistance , ohms:	
(50µm film, 25°C / 50% RH)	>2.3×10 <sup>14</sup>
Volume Resistivity, ohms-cm	1.04×10 <sup>16</sup>
Dielectric Strength, volts/mil	2,000
Dielectric Constant / Dissipation Factor @ 100 KHz	2.29 / 0.12

#### TYPICAL ENVIRONMENTAL RESISTANCE

Fungus Resistance per ASTM G21 Non nutrient

#### **GENERAL INFORMATION**

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

## **DIRECTIONS FOR USE**

### **Application**

- 1. Clean substrate to promote adhesion and prevent underfilm corrosion of copper conductors.
- 2. Apply via non-atomised selective film coater.
- 3. Verify compatibility with other assembly components (e.g. solder paste and flux).

#### Cleaning

 Remove wet or dry LOCTITE STYCAST PC 62 with Xylene or Methylethylketone (MEK). A suitable solvent is available from your local Henkel representative.

# 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: 5°C to 30°C. Storage below 5°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

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

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 0.2