

# LOCTITE STYCAST PC 40-UMF

May 2023

## PRODUCT DESCRIPTION

LOCTITE STYCAST PC 40-UMF provides the following product characteristics:

<b>Technology</b>	Urethane Acrylate
<b>Appearance</b>	Clear liquid
<b>Cure</b>	Ultraviolet (UV) light activation followed by room temperature moisture cure
<b>Product Benefits</b>	<ul style="list-style-type: none"> <li>• Single component</li> <li>• VOC free</li> <li>• UV and moisture curable</li> </ul>
<b>Operating Temperature - Continuous</b>	-40 to 135°C
<b>Application</b>	Conformal coating
<b>Key Substrates</b>	<ul style="list-style-type: none"> <li>• Variety of metal surfaces</li> <li>• Ceramic</li> <li>• Glass filled epoxy</li> </ul>

LOCTITE STYCAST PC 40-UMF conformal coating is specifically formulated to rapidly gel and immobilise when exposed to UV light and then fully cure when exposed to atmospheric moisture, ensuring optimum performance even in shadowed areas.

LOCTITE STYCAST PC 40-UMF conforms to IPC-CC-830 requirements.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Nominal Viscosity @ 25°C, mPa·s (cP)	250
Specific Gravity @ 25°C	1.08
Shelf Life @ 20 to 30°C, months	9
Flash Point - See SDS	

## TYPICAL CURING PERFORMANCE

### Recommended UV Cure

Light Source and Condition:

Ultraviolet (UV) light:

10 seconds @ 300 to 600 mW/cm<sup>2</sup>

UV Wavelength, nm 365

### Secondary Cure

Moisture cure for shadowed areas on a populated board.

2 to 3 days @ RT

The above cure profile is a guideline recommendation. Cure rate and ultimate depth of cure depend on light intensity, spectral distribution of light source, exposure time and the light transmittance of the substrate.

## TYPICAL PROPERTIES OF CURED MATERIAL

### Physical Properties

Hardness, Shore D	80
Thermal Conductivity @ 25°C, W/(m·K)	0.26

## Electrical Properties

Dielectric Constant @ 1MHz	2.75
Dissipation Factor @ 1MHz	0.12
Volume Resistivity, ohm-cm	3.5×10 <sup>16</sup>
Surface Resistivity, ohms	3.8×10 <sup>16</sup>
Dielectric Strength @ 2.64 mm thickness, volts/mil	420

## TYPICAL ENVIRONMENTAL RESISTANCE

### Outgassing Properties

Outgassing, NASA Outgassing:

TML, %	0.87
CVCM, %	<0.1
WVR, %	0.36

## GENERAL INFORMATION

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

### 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.

## DIRECTIONS FOR USE

1. Any tank should be pressurized with dry nitrogen.

## STORAGE

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

**Storage between 20 and 30°C out of sunlight and in original unopened containers. Refer to packaging specific quote for shelf life information.**

Once opened, containers should be purged with dry nitrogen.

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 Henkel Representative.

## Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$   
 $\text{kV/mm} \times 25.4 = \text{V/mil}$   
 $\text{mm} / 25.4 = \text{inches}$   
 $\text{N} \times 0.225 = \text{lb/F}$   
 $\text{N/mm} \times 5.71 = \text{lb/in}$   
 $\text{N/mm}^2 \times 145 = \text{psi}$   
 $\text{N/mm}^2 = \text{MPa}$   
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$   
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$   
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$   
 $\text{mPa}\cdot\text{s} = \text{cP}$



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