Technical Data Sheet

LOCTITE STYCAST PC 40-UMF

May 2023

PRODUCT DESCRIPTION

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

Technology	Urethane Acrylate
Appearance	Clear liquid
Cure	Ultraviolet (UV) light activation followed by room temperature moisture cure
Product Benefits	• Single component • VOC free • UV and moisture curable
Operating Temperature - Continuous	-40 to 135°C
Application	Conformal coating
Key Substrates	• Variety of metal surfaces • Ceramic • Glass filled epoxy

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 @ 25ºC, mPa·s (cP)	250
Specific Gravity @ 25ºC	1.08
Shelf Life @ 20 to 30ºC, 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/cm²

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^{16}
Surface Resistivity, ohms	3.8×10^{16}
Dielectric Strength @ 2.64 mm thickness, volts/mil	420

TYPICAL ENVIRONMENTAL RESISTANCE

Outgassing Properties

Outgassing , NASA Outgassing:

TML, %	0.87
CVCM, %	<0.01
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 30ºC 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

(°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
N/mm² x 145 = psi
N/mm² = MPa
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.

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 liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation, Resin Technology Group, Inc., or Henkel Canada, Inc.the following disclaimer is applicable:

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 3

This document was created and digitally signed by tdx.henkel.com at 2025-11-27T08:34:14.4422