Technical Data Sheet

LOCTITE STYCAST US 1195

October 2015

PRODUCT DESCRIPTION

LOCTITE STYCAST US 1195 provides the following product characteristics:

Technology	Urethane
Appearance - Part A	Dark brown liquid
Appearance - Part B	Black paste
Appearance (Mixed)	Black
Components	Two components - requires mixing
Mix Ratio by weight: Part A: Part B	11.5 : 100
Mix Ratio by volume: Part A: Part B	13.45 : 100
Product Benefits	• High Hardness • Mineral-filled • Low Tg
Cure	Room temperature cure followed by heat cure
Application	Potting and Encapsulating
Typical Assembly Applications	Circuit Board Protection, Automotive electronic applications or Telecommunication devices

LOCTITE STYCAST US 1195 is formulated for potting electronics or devices for protection against environmental hazards. This material exhibits high hardness compared to other urethane materials allowing improved durability and impact resistance. It's low Tg allows for better thermal cycle performance to meet low temperature requirements in harsh environments.

LOCTITE STYCAST US 1195 passed internal flammability testing at 3 mm thickness.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Part A Properties

Viscosity, Brookfield - RVF @ 25 °C, mPa·s (cP)	55
Density, gm/cc	1.24
Shelf Life @ 25°C (from date of manufacture), days	183
Flash Point - See SDS	

Part B Properties

Viscosity, Brookfield , mPa·s (cP):	
Spindle 51, speed 5.0 rpm	40,000
Density, gm/cc	1.45
Shelf Life @ 25°C (from date of manufacture), days	183

Mixed Properties

Viscosity, Brookfield , mPa·s (cP):	
Spindle 51, speed 5.0 rpm	19,000
Density, gm/cc	1.43

TYPICAL CURING PERFORMANCE

Gel Time

Gel Time, minutes	30

Recommended Cure

4 hours @ 65°C

The above cure profile is a guideline recommendation. 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

Shore Hardness, Shore A	91
Glass Transition Temperature (Tg) by TMA, °C	-75
Coefficient of Thermal Expansion, TMA, ppm/°C:	
Below Tg	58
Above Tg	128
Thermal Conductivity , Laser Flash, W/(m-K)	0.67

Electrical Properties

Volume Resistivity, ohm-cm	9.6×10^{14}
Dielectric Strength , @ 20 mil, kV/mm	42
Dielectric Constant / Dissipation Factor:	
@ 100K Hz	3.7/0.0342
@ 1 MHz	3.63/0.1208

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.

Note: Before using this product please purge approximately 30 ml. of material prior to application. Discard purged material in accordance with the Material Safety Data Sheet. A video instruction is available upon request.

STORAGE:

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

Optimal Storage: 25°C. Storage below -20°C or above 50°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.
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 explicity 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 mechantability 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 2