

LOCTITE US5501

September 2013

PRODUCT DESCRIPTION

LOCTITE US5501 provides the following product characteristics:

Technology	Urethane
Appearance - Part A	Amber
Appearance - Part B	White
Components	Two components - requires mixing
Mix Ratio, by volume - Part A: Part B	1 : 3.57
Mix Ratio, by weight - Part A: Part B	25.9 : 100
Cure	Room temperature cure
Application	Potting and Encapsulating

LOCTITE US5501 is a 100% solids, mineral filled, urethane adhesive that is very low in volatile components. This material is designed to be used as an adhesive for air filters in clean rooms.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Part B Properties

Specific Gravity	1.34
Viscosity, Brookfield - RVF, 25 °C, cP:	
Spindle 5, speed 50 rpm	3,320
Spindle 5, speed 100 rpm	3,184

Mixed Properties

Gel Time @ 25°C, minutes	6.2
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TYPICAL CURING PERFORMANCE

Recommended Cure

6 hours @ 25°C

Alternative Cure Schedule

1 hour @ 60°C

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties

Shore Hardness , Durometer A	90
Linear Shrinkage, %	0.93
Volumetric Shrinkage, %	<0.1
Weight Loss 168 hours @ 100°C%	0.35
Thixotropic Index	1

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. Some settling of fillers and pigments will occur with time. Mixing of components containing fillers or pigments is necessary prior to every use.
2. Weigh needed quantities together and mix until homogeneous.
3. Mix for 1 to 4 minutes depending on material quantity and viscosity.
4. Choose a mixing container that will be 1/2 to 3/4 full of material. This minimizes inclusion of bubbles into the mix.
5. Use spatulas or mixing paddles appropriate to container size. Scrape the sides and bottom of the container while mixing.
6. Wooden tools are not recommended.
7. For a bubble-free product, vacuum deair the separate components and/or mixture. Vacuum pressure should be 1mmHg to be effective.
8. Once opened, blanket the remaining product with dry nitrogen or dry air.
9. Reseal containers tightly and store in cool, dry conditions.
10. Blanket and reseal containers immediately after each use. This protects the remaining material from moisture contamination.
11. Use a drying tube on the ventilation opening of drums.
12. Never store chemical containers exposed to weather or direct sunlight.

STORAGE:

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

Liquid Storage - Liquids should be stored at 20 to 30°C in closed containers. If stored below 23°C, the material MUST be allowed to come to room temperature, in the sealed container, to avoid moisture contamination.

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

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

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 0.1