Technical Data Sheet

LOCTITE ABLESTIK UV300X

December 2016

PRODUCT DESCRIPTION

LOCTITE ABLESTIK UV300X provides the following product characteristics:

Technology	Acrylate
Appearance	Opaque slightly colored liquid gel
Product Benefits	• Fast cure • One component
Cure	Ultraviolet (UV) light
Application	Assembly
Typical Assembly Applications	Disk drive assembly
Typical Applications	Conformal coating and Component tracking

LOCTITE ABLESTIK UV300X single component, photocurable adhesive is designed for disk drive assembly applications such as conformal coating and component tracking. This product also contains a secondary thermal cure mechanism for applications that contain shadowed areas where light is unable to penetrate.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield SP #27, 25 °C, :	
Speed 2.5 rpm	70,000
Thixotropic Index (0.5/5 rpm)	3.8
Shelf Life @ 10°C, days	91
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Recommended UV Cure

Light Source and Condition:	
Ultraviolet (UV) light:	
Irradiance, mW/cm²	>50
UV Wavelength, nm	365
UV Fixture Time, second	1
UV Tack-Free Time, seconds	5

Secondary Thermal Cure

1hour @ 100°C or
2hours @ 85°C

Depth of Cure

The above cure profiles are guideline recommendations. 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 :

Hardness, Shore D	78
Glass Transition Temperature (Tg) by DMTA, Tan Δ Max, °C	88
Coefficient of Thermal Expansion , TMA expansion mode:	
Below Tg, ppm/°C	45
Above Tg, ppm/°C	188
Tensile Modulus, DMTA:	
N/mm²	2,027
(psi)	294,000
Refractive Index	1.52

TYPICAL PERFORMANCE OF CURED MATERIAL

Die Shear Strength:		
Alumina to Glass	N/mm²	25
	(psi)	(3,600)

GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. Packages removed from storage should be allowed to return to ambient temperature before use.
2. Safe light is recommended during handling prior to curing. Dimmed light may be used, if the adhesive is only being handled for short periods of time.
3. This adhesive is designed to cure upon exposure to UV light. UV curing is particularly advantageous where a very rapid cure or curing of a thin section of the assembly is required.
4. Wide ranges of light systems are available for UV cure, permitting curing of bond profiles in seconds, coupled with a tack-free surface.
5. This adhesive contains a secondary thermal cure initiator to allow cure of bond areas shadowed from light.

AVAILABILITY

1. This adhesive is available in a variety of syringes, ranging from 3.0ml to 30ml.

STORAGE:
Store in original, tightly covered containers in clean, dry areas. Storage information may be indicated on the product container labeling.

Optimal Storage : 10 °C

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
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 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 Corporation, 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.

Reference 1