

LOCTITE ABLESTIK UV 9110-9

December 2016

PRODUCT DESCRIPTION

LOCTITE ABLESTIK UV 9110-9 provides the following product characteristics:

| | |
|--------------------------------------|--|
| Technology | Acrylate |
| Appearance | Clear light amber liquid |
| Product Benefits | <ul style="list-style-type: none"> • One component • Fast UV cure • Excellent adhesion • Excellent flexibility • Solvent-free |
| Cure | Ultraviolet (UV)/ visible light |
| Application | Non-conductive adhesive |
| Typical Assembly Applications | Plastic bonding |
| Substrates | Rigid plastics and Semi-rigid plastics |

LOCTITE ABLESTIK UV 9110-9 has excellent adhesion to a number of engineering plastics and will cure through UV stabilized plastics. LOCTITE ABLESTIK UV 9110-9 maintains its adhesion and appearance characteristics after exposure to gamma sterilization. LOCTITE ABLESTIK UV 9110-9 cures under a broad range of light sources including spot, pulsed, and high intensity lamps. LOCTITE ABLESTIK UV 9110-9 is the higher hardness version of ECCOBOND UV 9110-6.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity @ 25°C, Rheometer, mPa·s (cP):

| | |
|---------------------------------------|------|
| Shear rate 10 s ⁻¹ | 2.5 |
| Density, ASTM D792, g/cm ³ | 1.05 |
| Shelf Life @ 18 to 25°C, days | 365 |
| Flash Point - See SDS | |

TYPICAL CURING PERFORMANCE

Recommended UV Cure

Light Source and Condition:

| | |
|------------------------------------|--------|
| Medium pressure mercury vapor lamp | |
| Lamp Power, W/cm | 80 |
| Exposure Time | 3 to 8 |

Tack Free Time

| | |
|-------------------------|---|
| Tack Free Time, seconds | 5 |
|-------------------------|---|

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, ASTM D2240:

| | |
|--------|----|
| @ 25°C | 83 |
| @ 75°C | 58 |

TYPICAL PERFORMANCE OF CURED MATERIAL

Tensile Lap Shear Strength , ASTM D1002:

PC to PC @ 25°C:

| | | |
|----------------------------|-------------------|---------|
| Cured 15 seconds @ 200W/in | N/mm ² | 9 |
| | (psi) | (1,310) |

Tensile Lap Shear Strength :

Percent of original value after conditioning, %:

| | |
|--|----|
| After 7 days water immersion @ 50°C | 60 |
| After 24 hours 90% isopropyl immersion | 95 |
| After 7 days 40°C/95% humidity | 75 |
| After 121°C aging: | |
| 7 days | 80 |
| 14 days | 60 |

GENERAL INFORMATION

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

THAWING:

1. DO NOT open the container before contents reach 25°C temperature. Any moisture that collects on the warmed up container should be removed prior to opening the container.
2. Once material has reached room temperature, the adhesive should not be re-refrigerated.
3. Voids can form in the syringes if syringes are repeatedly re-refrigerated.
4. For optimal performance, a consistent dispense temperature is recommended. This will reduce the effects of a potential temperature change between storage place and cleaning room.

DIRECTIONS FOR USE

1. Complete cleaning of the substrates should be performed to remove contamination such as oxide layers, dust, moisture, salt and oils which can cause poor adhesion or corrosion in a bonded part.
2. Shake the contents of the container in which the product is shipped until it is uniform in consistency. This ensures a homogeneous product.
3. LOCTITE ABLESTIK UV 9110-9 can be applied by dispensing equipment using small 0.25 to 1.37 mm needles at 35 to 70 KPa and will flow into gaps, but does not run or drip.

STORAGE:

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

Optimal Storage : 18 to 25 °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

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$

$\text{kV/mm} \times 25.4 = \text{V/mil}$

$\text{mm} / 25.4 = \text{inches}$

$\text{N} \times 0.225 = \text{lb}$

$\text{N/mm} \times 5.71 = \text{lb/in}$

$\text{psi} \times 145 = \text{N/mm}^2$

$\text{MPa} = \text{N/mm}^2$

$\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$

$\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$

$\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$

$\text{mPa}\cdot\text{s} = \text{cP}$

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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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