

LOCTITE ELA 9395BK

June 2019

PRODUCT DESCRIPTION

LOCTITE ELA 9395BK provides the following product characteristics:

Technology	Silane-modified polymer
Appearance	Black liquid
Cure	Moisture cure
Product Benefits	• Fast cure • One component for easy processing • Adheres well to a variety of substrates
Application	Device assembly, Elastomeric adhesive, Structural bonding
Typical Assembly Applications	Consumer electronic device assembly

LOCTITE ELA 9395BK one component silane modified polymer is formulated to cure by reaction with moisture. It is formulated to provide elastomeric properties without causing any cyclic silicone formation. This material creates a low modulus bond/seal between substrates to mitigate the intrusion of moisture and other fluids from entering the device while managing CTE (coefficient of thermal expansion) mismatch between different substrates.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield DV-II+, 25 °C, mPa·s (cP):	
Speed 5 rpm	75,000
Thixotropic Index (0.5/5 rpm)	4.5
Specific Gravity @ 25°C	1.36
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Recommended Cure Schedule

Under normal conditions, atmospheric moisture initiates the curing process. The adhesive develops functional strength in 24 hours and fully cures in 7 days.

Skin Over Time

Skin over time is the time the surface of the adhesive forms a skin upon exposure to atmospheric moisture at 25°C (± 2°C), 50 RH (±5% RH).

Skin Over Time, minutes	8
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Curing performance conditions are provided as a guideline. These conditions may vary based on process environment, application requirements, and adhesive dispensing process.

TYPICAL PROPERTIES OF CURED MATERIAL

Sample cured 24 hours @ 25°C (± 2°C), 50% RH (±10%)

Physical Properties

Hardness, Shore A, ISO 868	50
Elongation at break, ISO 527-2, %	≥180
Tensile Strength, ISO 527-2, N/mm ²	≥3.6

TYPICAL PERFORMANCE OF CURED MATERIAL

Shear Strength

Lap Shear Strength, ISO 4587:

Sample cured 2 hours @ 25°C:

Anodized Aluminum to Anodized Aluminum, N/mm ²	≥0.2
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Sample cured 24 hours @ 25°C:

Anodized Aluminum to Anodized Aluminum, N/mm ²	≥3
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Sample cured 168 hours @ 25°C:

Anodized Aluminum to Anodized Aluminum, N/mm ²	≥4.3
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GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. For best performance bond surfaces should be clean and free from grease.
2. Use gloves to minimize skin contact. DO NOT use solvents for cleaning hands.
3. For maximum bond strength apply adhesive evenly to the surface to be bonded. Parts should be assembled immediately after adhesive has been applied.
4. Join the adhesive coated surfaces and allow to cure.
5. Keep the assembled parts from moving during cure. The joint should be allowed to develop full strength before subjecting to any service loads.
6. Excessive uncured adhesive can be cleaned up with ketone type solvents.

STORAGE

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

Optimal Storage : 8 to 28 °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

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

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.

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