

# Liqui-Bond® SA 3505 (Two-Part)

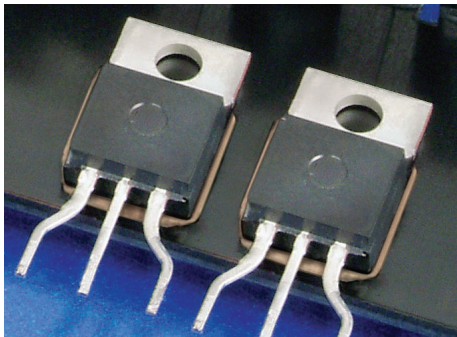
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## PRODUCT DESCRIPTION

Thermally Conductive, Two-Part,  
Liquid Silicone Adhesive

## FEATURES AND BENEFITS

- Thermal Conductivity: 3.5 W/m-K
- Eliminates need for mechanical fasteners
- Room Temperature Storage
- Maintains structural bond in severe environment applications
- Heat cure



Liqui-Bond® SA 3505 is a high performance, thermally conductive, liquid adhesive. This material is supplied as a two-part material and requires no refrigeration.

The mixed material cures at elevated temperatures. As cured, Liqui-Bond® SA 3505 provides a strong bonding, form-in-place elastomer. The material's mild elastic properties assist in relieving CTE stresses during thermal cycling.

Liquid dispensed thermal materials offer infinite thickness variations and impart little to no stress on sensitive components during assembly. Liqui-Bond® SA 3505 is available with optional glass spacer beads to provide a consistent bond line and ensure dielectric integrity.

*Note: To build a part number, visit our website at [www.bergquistcompany.com](http://www.bergquistcompany.com).*

## TYPICAL PROPERTIES OF LIQUI-BOND SA 3505

PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color / Part A	Brown	Brown	Visual
Color / Part B	Light Gray	Light Gray	Visual
Viscosity / Part A, High Shear (Pa-s) (1)	45	45	ASTM D5099
Viscosity / Part B, High Shear (Pa-s) (1)	30	30	ASTM D5099
Density (g/cc)	2.9	2.9	ASTM D792
Mix Ratio	1:1	1:1	—
Shelf Life @ 25°C (months)	6	6	—
<b>PROPERTY AS CURED</b>			
Color	Light Brown	Light Brown	Visual
Hardness (Shore A) (2)	90	90	ASTM D2240
Continuous Use Temp (°F) / (°C)	-76 to 392	-60 to 200	—
Shear Strength (psi) / (MPa)	450	3.15	ASTM D1002
<b>ELECTRICAL AS CURED</b>			
Dielectric Strength (V/mil) / (V/mm)	250	10,000	ASTM D149
Dielectric Constant (1000 Hz)	6.9	6.9	ASTM D150
Volume Resistivity (Ohm-meter)	10 <sup>10</sup>	10 <sup>10</sup>	ASTM D257
Flame Rating	V-O	V-O	U.L. 94
<b>THERMAL AS CURED</b>			
Thermal Conductivity (W/m-K)	3.5	3.5	ASTM D5470
<b>CURE SCHEDULE</b>			
Pot Life @ 25°C (3)	240 min (4 hr)	240 min (4 hr)	—
Cure @ 125°C (min) (4)	20	20	—
Cure @ 150°C (min) (4)	10	10	—
1) Capillary Viscosity, 600/sec, Part A and B measured separately. 2) Thirty second delay value Shore A hardness scale. 3) Based on 1/8" diameter bead. 4) Cure schedule — time after cure temperature is achieved at the interface. Ramp time is application dependent.			

## TYPICAL APPLICATIONS INCLUDE

- Power supplies
- Discrete component to heat spreader
- PCBA to housing

## CONFIGURATIONS AVAILABLE

- Supplied in cartridge or kit form

## 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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