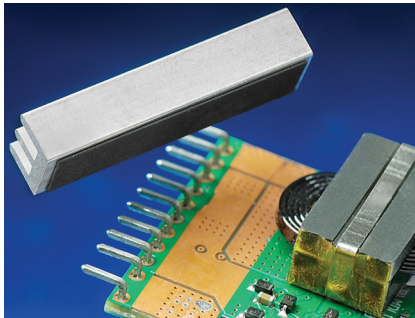


# Liqui-Bond® SA 1800 (One-Part)

Thermally Conductive, One-Part, Liquid Silicone Adhesive

## Features and Benefits

- High thermal conductivity: 1.8 W/m-K
- Eliminates need for mechanical fasteners
- Low viscosity for ease of screening or stenciling
- Maintains structural bond in severe-environment applications
- Heat cure



Liqui-Bond SA 1800 is a high performance, liquid silicone adhesive that cures to a solid bonding elastomer. The adhesive is supplied as a one-part liquid component, offered in a tube or mid-size container.

Liqui-Bond SA 1800 features a combination of high thermal conductivity with a low viscosity which allows for ease of screen or stencil application. This material is also ideal for high volume automated pattern dispensing. Liqui-Bond SA 1800's low viscosity allows the material to achieve a very thin bond line, producing excellent thermal performance and a high shear strength.

Liqui-Bond SA 1800's mild elastic properties assist in relieving CTE stresses during thermal cycling. The material cures at elevated temperatures and requires refrigeration storage at 10°C. Liqui-Bond SA 1800 is available with optional glass beads to provide a consistent stand-off and ensure dielectric integrity.

## TYPICAL PROPERTIES OF LIQUI-BOND SA 1800

PROPERTY AS SUPPLIED	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color	Black	Black	Visual
Viscosity (cps) (1)	125,000	125,000	ASTM D2196
Density (g/cc)	2.8	2.8	ASTM D792
Shelf Life @ 10°C (months)	6	6	—
PROPERTY AS CURED - PHYSICAL			
Hardness (Shore A)	80	80	ASTM D2240
Continuous Use Temp (°F) / (°C)	-76 to 392	-60 to 200	—
Shear Strength (psi) / (MPa)	200	1.4	ASTM D1002
PROPERTY AS CURED - ELECTRICAL			
Dielectric Strength (V/mil) / (V/mm)	250	10,000	ASTM D149
Dielectric Constant (1000 Hz)	6.0	6.0	ASTM D150
Volume Resistivity (Ohm-meter)	10 <sup>11</sup>	10 <sup>11</sup>	ASTM D257
Flame Rating	V-O	V-O	U.L.94
PROPERTY AS CURED - THERMAL			
Thermal Conductivity (W/m-K)	1.8	1.8	ASTM D5470
CURE SCHEDULE			
Pot Life @ 25°C (hours) (2)	10	10	—
Cure @ 125°C (minutes) (3)	20	20	—
Cure @ 150°C (minutes) (3)	10	10	—

1) Brookfield RV, Heli-path, Spindle TF @ 20 rpm, 25°C.  
 2) Based on 1/8" diameter bead.  
 3) Cure Schedule - time after cure temperature is achieved at the interface. Ramp time is application dependent.

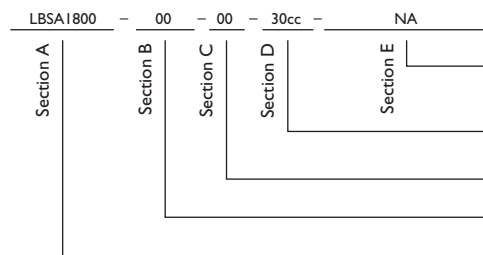
## Typical Applications Include:

- PCB assembly to housing
- Discrete component to heat spreader

## Configurations Available:

- With or without glass beads

## Building a Part Number



## Standard Options

◀ example

NA = Selected standard option. If not selecting a standard option, insert company name, drawing number, and revision level.

Cartridges: 30cc = 30.0cc, 600cc = 600.0cc (ml)  
 Pail: 0.85G = 0.85-gallon, 5G = 5-gallon

00 = No adhesive

00 = No spacer beads  
 07 = 0.007" spacer beads

LBSA1800 = Liqui-Bond SA 1800 (One-Part)  
 Liquid Adhesive Material

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



[www.bergquistcompany.com](http://www.bergquistcompany.com)

The Bergquist Company -  
 North American Headquarters  
 18930 West 78th Street  
 Chanhassen, MN 55317  
 Phone: 800-347-4572  
 Fax: 952-835-0430

The Bergquist Company -  
 European Headquarters  
 Netherlands  
 Phone: 31-35-5380684  
 Fax: 31-35-5380295

The Bergquist Company -  
 Asia Headquarters  
 Hong Kong  
 Phone: 852-2690-9296  
 Fax: 852-2690-0782

All statements, technical information and recommendations herein are based on tests we believe to be reliable, and THE FOLLOWING IS MADE IN LIEU OF ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MARKETABILITY AND FITNESS FOR PURPOSE. Sellers' and manufacturers' only obligation shall be to replace such quantity of the product proved to be defective. Before using, user shall determine the suitability of the product for its intended use, and the user assumes all risks and liability whatsoever in connection therewith. NEITHER SELLER NOR MANUFACTURER SHALL BE LIABLE EITHER IN TORT OR IN CONTRACT FOR ANY LOSS OR DAMAGE, DIRECT, INCIDENTAL OR CONSEQUENTIAL, INCLUDING LOSS OF PROFITS OR REVENUE ARISING OUT OF THE USE OR THE INABILITY TO USE A PRODUCT. No statement, purchase order or recommendations by seller or purchaser not contained herein shall have any force or effect unless in an agreement signed by the officers of the seller and manufacturer.

PDS\_LBSA1800\_0312