

LOCTITE ABLESTIK 59C

October 2014

PRODUCT DESCRIPTION

LOCTITE ABLESTIK 59C provides the following product characteristics:

Technology	Silicone
Filler Type	Silver
Appearance	Silver
Percent Solids, %	85
Product Benefits	• Thixotropic • Electrically conductive • Thermally conductive • Pressure sensitive • One component • Contains solvent • High flexibility • High tack • Reworkable • Can be used with a variety of catalysts
Cure	Heat cure
Application	Assembly
Operating Temperature	-55 to +260°C

LOCTITE ABLESTIK 59C adhesive is designed for applications used at high temperatures which require electrical conductivity and do not need a high bond strength. It can be used in its cured or uncured state.

LOCTITE ABLESTIK 59C can be used with a variety of catalysts. For more information on mixed properties when used with other available catalysts, please contact your local technical service representative for assistance and recommendations.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Density, g/cm ³	2.4
Shelf Life @ 25°C, months	6
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Cure Schedule

6 hours @ 150°C

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

Coefficient of Thermal Expansion TMA, 10 ⁻⁶ /°C	63
Thermal Conductivity, W/(m-K)	7

Electrical Properties

Volume Resistivity @ 25°C, ohm-cm	0.0002
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TYPICAL PERFORMANCE OF CURED MATERIAL

Miscellaneous:

Tensile Lap Shear Strength, psi:	
Aluminum to Aluminum	20

GENERAL INFORMATION

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

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. Some filler settling is common during shipping and storage. For this reason, it is recommended that the contents of the shipping container be thoroughly mixed prior to use.
3. Apply adhesive to all surfaces to be bonded and join together.
4. Allow the solvent to evaporate until the film passes through a highly tacky state and then becomes only slightly tacky. This process normally takes 10 to 20 minutes.
5. If the adhesive is allowed to stand too long on the surfaces, all tackiness will be lost. Tackiness can usually be restored by applying small amounts of Toluene to the surface.
6. Join surfaces to be bonded and apply pressure. Usually, hand pressure is satisfactory.

Storage

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

Optimal Storage: 25°C. Storage below 25°C or greater than 25°C can adversely affect product properties.

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.

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

Conversions

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

Reference 0.1

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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Americas
+1.888.943.6535

Europe
+32.1457.5611

Asia
+86.21.3898.4800

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