

LOCTITE ABLESTIK 59C CAT 59

October 2014

PRODUCT DESCRIPTION

LOCTITE ABLESTIK 59C CAT 59 provides the following product characteristics:

Technology	Silicone
Filler Type	Silver
Appearance	Silver
Components	Two components - requires mixing
Mix Ratio - Material:Catalyst	100 : 2
Percent Solids, %	85
Product Benefits	<ul style="list-style-type: none"> • Thixotropic • Electrically conductive • Thermally conductive • Pressure sensitive • Contains solvent • High flexibility • High tack • Reworkable
Cure	Heat cure
Application	Assembly
Operating Temperature	-55 to +260°C

LOCTITE ABLESTIK 59C CAT 59 adhesive is designed for applications requiring very high temperature exposures. This adhesive can withstand continuous exposure at temperatures as high as 150 to 260°C. It can be used in its cured or uncured state.

LOCTITE ABLESTIK 59C CAT 59 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

Part A Properties 59C

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

Part A Properties 59C

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
-----------------------------------	--------

Mixed Properties 59C/CAT 59

Electrical Properties:

Volume Resistivity @ 25°C, ohm-cm	0.007
-----------------------------------	-------

TYPICAL PERFORMANCE OF CURED MATERIAL

Part A Properties 59C

Miscellaneous:

Tensile Lap Shear Strength, psi: Aluminum to Aluminum	20
--	----

Mixed Properties 59C/CAT 59

Miscellaneous:

Tensile Lap Shear Strength, psi: Aluminum to Aluminum	0.007
--	-------

GENERAL INFORMATION

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

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.

Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 1

Conversions

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

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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:

In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:

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. 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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation, Resin Technology Group, Inc., or Henkel Canada Corporation, the following disclaimer is applicable:

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

Trademark usage

Except as otherwise noted, all trademarks in this document are trademarks of

Americas
+1.888.943.6535

Europe
+32.1457.5611

Asia
+86.21.3898.4800

For the most direct access to local sales and technical support visit: www.henkel.com/electronics