



Loctite Ablestik 59CU/Catalyst 59

Formerly Eccobond 59CU/Catalyst 59

January 2010

PRODUCT DESCRIPTION

Ablestik 59CU/Catalyst 59 provides the following product characteristics:

Technology	Silicone
Filler Type	Silver
Appearance	Silver
Components	Two component - requires mixing
Mix Ratio	100 : 2
Material: Catalyst	
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

ABLESTIK 59CU / Catalyst 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.

ABLESTIK 59CU 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 59CU:

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

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 59CU:

Physical Properties:

Coefficient of Thermal Expansion TMA, 10 ⁻⁶ /°C	63
Thermal Conductivity, W/mk	7

Electrical Properties:

Volume Resistivity @ 25°C, ohm-cm	0.0002
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Mixed Properties 59CU/Catalyst 59:

Electrical Properties:

Volume Resistivity @ 25°C, ohm-cm	0.007
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TYPICAL PERFORMANCE OF CURED MATERIAL

Part A Properties 59CU:

Miscellaneous:

Tensile Lap Shear Strength , psi: Aluminum to Aluminum	20
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Mixed Properties 59CU/Catalyst 59:

Miscellaneous:

Tensile Lap Shear Strength , psi: Aluminum to Aluminum	0.007
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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

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

Note

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.

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