

# LOCTITE EDAG 440B E&C

September 2012

## PRODUCT DESCRIPTION

LOCTITE EDAG 440B E&C provides the following product characteristics:

<b>Technology</b>	Acrylic
<b>Appearance</b>	Black
<b>Product Benefits</b>	<ul style="list-style-type: none"> <li>• Conductive</li> <li>• Screen printable</li> <li>• Good flexibility</li> <li>• Excellent adhesion</li> <li>• No thinning required</li> <li>• Long shelf life without refrigeration</li> <li>• Fine-line printability</li> <li>• Long screen residence time</li> </ul>
<b>Cure</b>	Heat cure
<b>Application</b>	Conductive coating
<b>Typical Assembly Applications</b>	Membrane keyboards and Flexible printed circuits
<b>Substrates</b>	Polyester and Vinyl

LOCTITE EDAG 440B E&C thick film material is formulated to provide excellent print properties. It is compatible and can be overprinted onto Electrodag 725A silver conductor and other Henkel products.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Solids Content by Weight, %	38
Density, kg/l	1.37
Theoretical coverage, m <sup>2</sup> /kg	8.2
Shelf Life, from date of qualification in original seal, days	365
Flash Point, °C	100

## TYPICAL SCREEN PRINTING PROCESS

### Recommended Thickness

Cured, µm	7.62 to 15.2
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### Emulsion Thickness

Solvent resistant emulsion, µm	12.7 to 38.1
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### Recommended Screen Type

Polyester screen, mesh	170 to 325
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## TYPICAL CURING PERFORMANCE

### Recommended Cure Schedule

10 minutes @ 107°C

Various time/temperature ranges can be used to fit most production environments. This product can be cured under infrared conditions. Low conductivity and poor adhesion performance are symptomatic of under-curing.

## Percent Volatiles

VOC, g/l	849
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The above drying profile is a guideline recommendation. Conditions (time and temperature) may vary based on customers' experience and their application requirements, as well as customer drying equipment, oven loading and actual oven temperatures.

## TYPICAL PROPERTIES OF CURED MATERIAL

After screen printing and curing for 10 minutes @ 107°C

### Physical Properties

Tape Adhesion, maximum change in resistance, %	1
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### Electrical Properties

Volume Resistivity, ohms/sq	40
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## GENERAL INFORMATION

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

## DIRECTIONS FOR USE

1. Do not freeze
2. Keep product container tightly closed when not in use
3. **Mixing/Dilution**
  - Ensure ink is in room temperature.
  - Product is ready for use but should be mixed thoroughly using a plastic spatula.
  - Mix smoothly from bottom of container, careful not to whip air in to the product. Using a plastic spatula will decrease the possibility of introducing plastic grindings from the container sidewalls into the product, possibly clogging the screens.

## Clean-up

To clean screen and equipment, use Methyl ethyl ketone (MEK) or similar solvents. Clean the mesh of the screen until free of all visible particles in the screen. Allow screen to completely dry before using again.

**Storage**

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

**Optimal Storage : 25 °C**

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.

Empty containers may retain hazardous properties.

**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**

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

**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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Reference 0.1