

LOCTITE EDAG 725A(6S54) E&C

September 2014

PRODUCT DESCRIPTION

LOCTITE EDAG 725A(6S54) E&C provides the following product characteristics:

Technology	Thermoplastic
Appearance	Silver
Filler Type	Silver
Product Benefits	• Conductive • Low electrical resistance • Excellent adhesion • No thinning required • Process ease • Excellent flexibility • Good printability • Good screen residence time • Good shelf life
Cure	Heat cure
Application	Conductive Ink
Operating Temperature-Maximum	100°C
Typical Assembly Applications	Membrane keyboards, membrane touch switches and Flexible circuits

LOCTITE EDAG 725A(6S54) E&C polymer thick film ink is designed for use in the production of low voltage circuitry on polyester film.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Solids Content (3 hours @ 110°C), %	60
Viscosity, Brookfield, mPa·s (cP):	
Speed 20 rpm, @ 20°C	12,500
Density, kg/cm³	2,140
Theoretical coverage, m²/kg:	
@ 10µm dry coating thickness	11
Shelf Life @ 4 to 8°C, year:	
From date of qualification in original seal	1
Flash Point, Tag Closed Cup Flash Tester, °C	100

TYPICAL SCREEN PRINTING PROCESS

Emulsion Thickness	
Solvent resistant emulsion, µm	10 to 40
Recommended Squeegee	
Shore Hardness	70 to 80
Recommended Screen Type	
Monofilament polyester screen, threads/cm	64 to 80
Stainless steel screen, threads/cm	68 to 130
Printing Equipment Type	
Manual	
Semi-automatic	
High speed reel-to-reel	

TYPICAL CURING PERFORMANCE

Recommended Drying Cycle

15 minutes @ 120°C

The above cure profile is a guideline recommendation. 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

Dry Coating on Polyester foil, dried 15 minutes @ 120°C

Physical Properties

Adhesion, grade	5B
Cohesion test (resistance change), %	<3

Electrical Properties

Sheet Resistivity @ 25µm, ohms/sq	≤0.015
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GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. Mix thoroughly with plastic spatula or mechanical stirrer 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, which could damage the screen
2. Bring product to room temperature prior to use.
3. LOCTITE EDAG 725A(6S54) E&C is supplied ready for use. Should thinning become necessary, dilute 1 to 3% by weight with Electrodag™ DBE.

Clean-up

To clean screen and equipment, use Methyl ethyl ketone (MEK) or similar solvents

Storage

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

Optimal Storage : 4 to 8 °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.

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 0.2