



LOCTITE® EDAG 965SS

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PRODUCT DESCRIPTION

LOCTITE® EDAG 965SS provides the following product characteristics:

Technology	Thermoplastic
Appearance	Dark gray
Product benefits	• Conductive • Screen printable • Excellent screen residence time • Flexible low temperature drying cycles • Excellent adhesion to polyester film and other LOCTITE® silver inks
Operating temperature, °C	100 continuous
Cure	Heat drying
Application	Conductive coating
Typical assembly applications	• Protective coating on silver tracks and pads in membrane switches • Keyboards • Conductive jumpers in membrane switches • Protection against electrostatic discharge (ESD)
Key substrates	PET, PEN, PI, Paper

LOCTITE® EDAG 965SS is a conductive carbon ink which offers optimal adhesion and abrasion resistance. Therefore, it is especially useful to protect silver pads and tracks from chemical attack and silver migration. LOCTITE® EDAG 965SS is suitable for screen printing and can be blended with silver inks LOCTITE® EDAG 479SS or LOCTITE® EDAG PF 410.

TYPICAL PROPERTIES OF UNDRIED MATERIAL

Solids content, %	38
Density, kg/cm ³	1,100
Viscosity @ 20°C, Brookfield RVT, after 15 min, mPa.s (cP) Speed 20 rpm	34,000
Theoretical coverage, m ² /kg Wet product @ 10µm dry coating thickness	30
Shelf life @ 5 to 30°C, days	365
Flash point, °C	110

TYPICAL SCREEN PRINTING PROCESS

Printing equipment type

- Manual
- Semi-automatic
- High speed reel-to-reel

Recommended screen type

Monofilament polyester screen, threads/cm 61 to 90

Recommended squeegee

Polyurethane, durometer 70 to 75

Applied dry coating thickness

Applied dry coating thickness, µm 8 to 10

Emulsion thickness

Emulsion thickness, µm 20 to 40

TYPICAL DRYING PERFORMANCE

Recommended drying cycle

15 minutes, 120°C

LOCTITE® EDAG 965SS can be dried immediately after printing at temperatures . The higher the temperature, the lower the sheet resistance and the better the mechanical properties.

For high speed production jet drying, infra red drying and drying in high speed reel-to-reel equipment can be used successfully.

TYPICAL PROPERTIES OF THE DRIED MATERIAL

Physical properties

Adhesion 5B

Electrical properties

Sheet resistance, 4-point probe, Ohm/sq/25µm
drying 15 min at 120°C 38
drying 15 min at 90°C 47

GENERAL INFORMATION

Please consult the Safety Data Sheet (SDS) for safe handling information of this product.



Directions for use

1. LOCTITE® EDAG 965SS is supplied ready for use.
2. Should dilution be necessary, use 2-(2-Ethoxyethoxy) ethyl acetate (CAS: 112-15-2). Henkel recommends a maximum of 10 wt%. This should be accomplished by adding solvent at 0.5 wt% intervals until desired viscosity and printability is achieved.
3. Mix thoroughly before use to ensure the entire ink volume is homogenous. A slow speed propeller may be utilized to mix until product is uniform. Avoid rapid stirring as this causes air entrapment.

Clean up

The screen and equipment can be cleaned with dilution solvent, or esters (butylacetate, propylacetate, or ethylacetate), or ketones (MEK, Acetone), or similar solvents.

Storage

Store product in the unopened container in a cool dry well ventilated area. Storage information may be indicated on the product container labeling.

Optimal storage: 5 to 30°C

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel 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 Henkel representative.

Empty containers may retain hazardous properties.

Conversions

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

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