

# LOCTITE EDAG ML 25265 E&C

September 2014

## PRODUCT DESCRIPTION

LOCTITE EDAG ML 25265 E&C provides the following product characteristics:

|                                      |  |
|--------------------------------------|--|
| <b>Technology</b>                    | Acrylic  |
| <b>Appearance</b>                    | Translucent  |
| <b>Operating Temperature-Maximum</b> | 149°C  |
| <b>Product Benefits</b>              | <ul style="list-style-type: none"> <li>• Screen printable</li> <li>• Insulating</li> <li>• Dielectric</li> <li>• Fast UV cure</li> <li>• Excellent adhesion</li> <li>• High peel strength in high temperatures and humidity</li> </ul> |
| <b>Cure</b>                          | Ultraviolet (UV) light   |
| <b>Application</b>                   | Dielectric ink   |
| <b>Typical Applications</b>          | Insulating crossover bridge, Dot spacer for digitizers and Spacer for copper etched circuitry  |
| <b>Key Substrates</b>                | ITO sputtered polyester film, Metals and Glass   |

LOCTITE EDAG ML 25265 E&C screen printable ink is designed for use as an insulator for printed circuitry or dot spacer on ITO sputtered polyester film. This adhesive is compatible with EDAG E&C silver and carbon inks.

This product does not adhere well to non-printed treated, non-ITO sputtered polyester film

LOCTITE EDAG ML 25265 E&C is the translucent version of ML25240 (Green)

## TYPICAL PROPERTIES OF UNCURED MATERIAL

|  |       |
|--|-------|
| Solids Content by Weight, %  | 100   |
| Density, kg/l  | 1.15  |
| Viscosity, Brookfield - RVT, 25 °C, mPa·s (cP):                                |       |
| Spindle 5, speed 20 rpm  | 7,500 |
| Shelf Life @ below 60°C, days<br>(from date of qualification in original seal) | 365   |
| Flash Point, °C  | 101   |

## TYPICAL SCREEN PRINTING PROCESS

### Recommended Film Thickness

|                     |          |
|---------------------|----------|
| For crossovers, µm  | 28 to 51 |
| For spacers, µm     | 51 to 76 |
| 80 mesh screen, µm  | 51 to 76 |
| 160 mesh screen, µm | 33       |
| 200 mesh screen, µm | 23 to 25 |

### Emulsion Type

Diazo sensitized direct photo film

## Recommended Screen Mesh

Polyester Mesh, T 80 to 300

When using as a crossover, be sure to flash cure the inks printed over it within 5 minutes. Do not let the ink printed over LOCTITE EDAG ML 25265 E&C air dry for extended periods of time.

## TYPICAL CURING PERFORMANCE

### Recommended UV Cure Condition

@ 25µm, EIT Radiometer, Joule/cm<sup>2</sup> each pass 0.3 to 0.6

At thickness greater than 25µm, lower speeds and higher intensities are needed.

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

### Physical Properties :

|   |      |
|---|------|
| Theoretical Coverage, m <sup>2</sup> /l     | 39.3 |
| Adhesion to ITO film, @ 25µm film thickness | 5B   |

### Electrical Properties:

|   |       |
|---|-------|
| Dielectric Strength, IEC 60243-1, @ 25µm, volts | 2,500 |
|---|-------|

## GENERAL INFORMATION

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

## DIRECTIONS FOR USE

1. LOCTITE EDAG ML 25265 E&C is supplied ready for use.
2. Do not let inks printed over this material air dry for extended periods of time.
3. Do not freeze.

## CLEAN-UP

To clean screen and equipment, use MEK, MIBK, Isopropanol or similar solvents

## STORAGE:

Store product in original container, undiluted. Storage container may be indicated on the product container labeling.

Keep container tightly closed when not in use.

**Optimal Storage: Below 60°C. Storage greater than 60°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

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

### 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.

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### Reference 1