

# LOCTITE EDAG 1415M E&C

June 2021

## PRODUCT DESCRIPTION

LOCTITE EDAG 1415M E&C provides the following product characteristics:

|                              |  |
|------------------------------|--|
| <b>Technology</b>            | Thermoplastic  |
| <b>Appearance</b>            | Silver   |
| <b>Operating Temperature</b> | 105 °C   |
| <b>Product Benefits</b>      | <ul style="list-style-type: none"> <li>• Maintains low resistance after exposure to the elements</li> <li>• Does not require primer or top coat</li> <li>• Easily applied by spray or brush</li> </ul> |
| <b>Cure</b>                  | Air dry  |
| <b>Application</b>           | Conductive coating   |

LOCTITE EDAG 1415M E&C shielding coating is designed to provide electromagnetic compatibility (EMC). It is compatible with plastics commonly used for electronic equipment enclosures.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

|  |       |
|--|-------|
| Solids Content, %  | 58    |
| Viscosity, Brookfield , 20 °C, mPa·s (cP):                                   |       |
| Speed 20 rpm   | 375   |
| Density, Kg/m <sup>3</sup>   | 1,630 |
| Theoretical coverage @ 10µm coating thickness, 9 m <sup>2</sup> /kg          |       |
| Shelf Life @ 5 to 30°C, months (from date of qualification in original seal) | 18    |
| Flash Point , °C   | 14    |

## TYPICAL DRYING CYCLE

### Recommended Drying Cycle

30 minutes @ 70 to 80°C

For production runs, conventional forced drying methods may be used for faster processing. Forced drying of the coating will noticeably improve conductivity.

LOCTITE EDAG 1415M E&C dries to touch in about 10 minutes and can be handled after a further approximately 10 minute hold, depending on ambient temperature.

Good coating properties will be achieved after 4 to 8 hours air drying, depending on coating thickness and temperatures.

## TYPICAL PROPERTIES OF CURED MATERIAL

Sample tested @ 25µm coating thickness

## Electrical Properties

|                             |        |
|-----------------------------|--------|
| Attenuation @ 1,000 MHz, dB | 60     |
| Sheet Resistance, ohms/sq   | <0.015 |

## GENERAL INFORMATION

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

## DIRECTIONS FOR USE

### 1. Surface Preparation

- Surface to be coated must be dry and free on contaminants such as oil or chemical residues.

### 2. Mixing/Dilution

- Thoroughly homogenize LOCTITE EDAG 1415M E&C before use. Check to make sure there are no unmixed solids at the bottom of the container
- Recommended dilution ratio(s) as follows:
  - Brush Application:** Use LOCTITE EDAG 1415M E&C neat
  - Spray Application:**
    - Use MEK/Diacetone alcohol blend
    - By Weight: 2 part(s) product to 1 part(s) solvent
- If the evaporation speed of this mixture is too high, reduce the amount of Methyl ethyl ketone (MEK)

### 3. Application

- When applying LOCTITE EDAG 1415M E&C by spray, a conventional paddle-agitated pressure tank system should be used.
- It is recommended to maintain a spray pressure of 2 to 2.5 bar with a nozzle diameter varying from 1 to 1.5 mm.
- Small prototype runs may be sprayed with well-mixed product, using suction cup spray equipment.
- A 10 to 15µm coating thickness is recommended for good EMI shielding performance.
- Avoid dry spraying for maximum adhesion and conductivity.

## 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 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 Henkel Representative.

Empty containers may retain hazardous properties.

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#### Conversions

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

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Reference 0.2