

# LOCTITE EDAG 1415M E&C

October 2014

## 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, m <sup>2</sup> /kg              | 9     |
| Shelf Life @5 to 30°C, months<br>(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 Material Safety Data Sheet, (MSDS).

## 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 Diacetone Alcohol (DAA)

### 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.

## Clean-up

1. For high volume production where masks are used to prevent coating certain areas, the masks can be cleaned with esters (butylacetate, ethylacetate) or MIBK, MEK solvents solvents..
2. Spray or mixing equipment may be cleaned with the same 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 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