

# **LOCTITE EDAG PM 460A E&C**

October 2014

## PRODUCT DESCRIPTION

LOCTITE EDAG PM 460A E&C provides the following product characteristics:

orial actoriotico.	
Technology	Thermoplastic
Appearance	Silver
Operating Temperature- Maximum	105°C
Solvent	n-Propylacetate
Product Benefits	Conductive
	Flexible coating
Cure	Hot air drying or infrared
Application	Conductive coating
Typical Assembly	Electronic circuitry, RFID antenna and
Applications	Bio and medical sensors
Key Substrates	Plastics and Paper substrates

LOCTITE EDAG PM 460A E&C is designed to dry rapidly to form a flexible, conductive coating. It is suitable for applications using flexographic or rotogravure printing techniques. The coating will maintain its low resistance even after exposure to heat, cold and humid conditions.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Solids Content, %	72
Viscosity @ 20 °C, mPa·s (cP):	
Speed 20 rpm	4,000
Density, kg/cm³	2,340
Theoretical coverage, m <sup>2</sup> /kg:	
@ 10 µm coating thickness	11
Shelf Life @5 to 30°C, year	1
(from date of qualification in original seal)	
Flash Point . °C	12

#### TYPICAL PROPERTIES OF CURED MATERIAL

Coating on Glass, dried 15 minutes @ 70°C

## **Electrical Properties**

Sheet Resistivity , ohms/sq:	
@ 1 mil coating thickness	<0.01

# **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 mix LOCTITE EDAG PM 460A E&C before use.
  There should be no unmixed solid material left at the bottom of the container.
- The product can be diluted with n-Propylacetate to the required viscosity level for flexographic or rotogravure printing.
- Dilution should be kept to a minimum to avoid too much reduction of the dry film deposit.

#### 3. Application

- This product can be applied by flexographic or rotogravure printing techniques.
- A dry coating thickness up to 2 µm in one print pass can be applied by selecting the proper anilox or gravures.
- If higher coating thicknesses are required, this should be applied in more than one print pass.

# 4. Drying

- Use high velocity hot air and/or infra-red systems for optimum performance.
- High temperatures for long durations improve performance.
- Design drying rates for the maximum the substrate and production speeds can tolerate.

## 5. Cleanup

 The equipment can be cleaned with ketones (MIBK, MEK) or esters (n-Propylacetate, Ethyl Acetate).

## 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

(°C x 1.8) + 32 = °F kV/mm x 25.4 = V/mil mm / 25.4 = inches N x 0.225 = lb N/mm x 5.71 = lb/in N/mm² x 145 = psi MPa = N/mm² MPa x 145 = psi N·m x 8.851 = lb·in N·m x 0.738 = lb·ft N·mm x 0.142 = oz·in mPa·s = 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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:

In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

# In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:

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. 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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

#### In case products are delivered by Henkel Corporation, Resin Technology Group, Inc., or Henkel Canada, Inc.the following disclaimer is applicable:

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. The discussion herein of various processes or compositions is not to be

interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

#### Trademark usage

Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 0.1

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Loctite:

1395660