Technical Data Sheet

LOCTITE EDAG PM406V1 E&C

March 2016

PRODUCT DESCRIPTION

LOCTITE EDAG PM406V1 E&C provides the following product characteristics:

Technology	Thermoplastic
Appearance	Gray paste
Filler Type	Silver
Cure	Hot air drying
Operating Temperature-Maximum	100ºC
Product Benefits	• High conductivity • High solids • Fast drying
Application	Conductive Ink
Typical Assembly Applications	Printed circuitry, RFID and other conductive circuits
Key Substrates	PET, Paper and PVC

LOCTITE EDAG PM406V1 E&C is a screen printable, conductive ink formulated to have very high conductivity and solids content.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Solids Content, %	79
Viscosity, Brookfield , 20 °C, mPa·s (cP):	
Speed 20 rpm	21,600
Density, g/ml	3.0
Theoretical coverage @ 10µm dry coating thickness, m² /kg	10
Shelf Life @ 4 to 8 °C (from date of qualification in original seal), year	1
Flash Point - See SDS	

TYPICAL SCREEN PRINTING PROCESS

Recommended Screen Type

Polyester screen , mesh	160 to 200

Recommended Squeegee Hardness

Squeegee Hardness	70 to 90

Emulsion Thickness

Solvent resistant emulsion , µm	10 to 40

TYPICAL DRYING CYCLE

Recommended Drying Cycle

30 minutes @ 90°C or
15 minutes @ 120°C

LOCTITE EDAG PM406V1 E&C can be dried with forced air or infrared systems. Higher temperatures for longer time will improve the performance. However, care should be taken with infrared. Too much energy can destroy the coating. Design drying rates for the maximum the substrate and production speeds can tolerate.

The above drying profile is a guideline recommendation. Conditions (time and temperature) may vary based on customers' experience and their application requirements, as well as customer drying equipment, oven loading and actual oven temperatures.

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties

Adhesion , grade	5B

Electrical Properties

Sheet Resistivity , ohms/sq	
@ 25 µm dry coating thickness	<0.015

GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. **Surface Preparation**
   - Thoroughly clean the surface prior to application of ink.
2. **Mixing/Dilution**
   - Stir to ensure homogeneity before use.
   - This can be done with a propeller mixer.
   - If needed, the ink can be diluted with Butyl glycol acetate.

Clean-up

To clean screen and equipment, use MEK, MIBK, Butyl Acetate or Ethyl Acetate

Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage : 4 to 8 °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.

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
psi x 145 = N/mm²
MPa = N/mm²
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:
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