Technical Data Sheet

LOCTITE EDAG 479SS E&C

June 2023

PRODUCT DESCRIPTION

LOCTITE EDAG 479SS E&C provides the following product characteristics:

Technology	Thermoplastic
Appearance	Grey Paste
Filler Type	Silver
Cure	Heat Drying
Operating Temperature -Maximum	120ºC
Product Benefits	• Good conductivity • Low temperature drying • Excellent abrasion resistance and hardness • Excellent creasability • Excellent fine line printing • Extended screen residence time • Superior adhesion to polyester film • Screen printable
Application	Conductive Ink
Typical Assembly Applications	Membrane switches and Flexible circuitry display devices
Typical Substrates	PET, PEN, PI

LOCTITE EDAG 479SS E&C conductive, silver-based polymer thick film ink specifically designed for screen printing onto membrane switches.

TYPICAL PROPERTIES OF UNDRIED MATERIAL

Solids Content by Weight, %	74.6
Viscosity, Brookfield - RVT, mPa·s (cP):	
Spindle 6, speed 20 rpm, following 5-min shake 3-hr rest	20,000
Density, kg/l	2.56
Shelf Life @ 2 to 8°C (from date of manufacture), days	365
Flash Point , Tag Closed Cup Flash Tester, °C	110
Theoretical coverage @ 10µm dry film thickness, m^2 /kg	15

TYPICAL SCREEN PRINTING PROCESS

Recommended Thickness

Dry Film , µm	4 to 12

Emulsion Thickness

Solvent resistant emulsion , µm	20 to 40

Recommended Screen Type

Monofilament polyester screen, mesh/inch	157 to 280
Stainless steel screen, mesh/inch	165 to 325

Recommended Squeegee

Polyurethane or other solvent resistant material

Polyester screen , durometer	60 to 70
Stainless steel screen, durometer	70 to 80

TYPICAL CURING PERFORMANCE

Recommended Drying Cycle

15 minutes @ 93°C

Percent Volatiles

VOC, g/l	653

Higher temperatures and longer durations improve conductivity and film properties.

The above cure profile is a guideline recommendation. These cure conditions (time and temperature) may vary based on customers' experience and specific application requirements, as well as customer curing equipment, oven loading and actual oven temperatures.

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties

Pencil hardness	2H

Electrical Properties

Sheet Resistance , Ohm/sq/25µm	<0.02

GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. Do not expose wet ink to direct sunlight.
2. Do not freeze.
3. Keep product container tightly closed when not in use.
4. LOCTITE EDAG 479SS E&C is supplied ready for use. Should thinning become necessary, dilute 2% by weight with Carbitol acetate.
5. LOCTITE EDAG 479SS E&C should be thoroughly stirred prior to use. Avoid rapid stirring as this causes air entrapment.

CLEAN-UP

1. To clean screen and equipment, use a 25% Carbitol acetate 75% Methylethylketone (MEK) blend.

STORAGE

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

Store in a cool, well ventilated area.

Optimal Storage : 2 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 Henkel Representative.

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local Henkel representative for assistance and recommendations on the specifications of 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/F
N/mm x 5.71 = lb/in
N/mm² x 145 = psi
N/mm² = MPa
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

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