

LOCTITE EDAG 6038SS E&C

April 2020

PRODUCT DESCRIPTION

LOCTITE EDAG 6038SS E&C provides the following product characteristics:

Technology	Thermoplastic
Appearance	Silver
Filler Type	Silver, Silver chloride blend
Silver : Silver chloride Ratio	9 : 1
Cure	Hot air drying
Operating Temperature - Continuous	100°C
Product Benefits	<ul style="list-style-type: none"> • Applicable with manual and semi-automatic • Compatible for use with Polycarbonate and polyester sheet and film • Non-critical, flexible low temperature drying cycles • Good flexibility
Application	Conductive Ink
Typical Medical Device Application	ECG disposable electrodes and Bio medical sensors

LOCTITE EDAG 6038SS E&C conductive, screen printable ink consist of very finely divided silver and silver chloride particles in a blend of thermoplastic resins. It is specially designed for use as an electrode material in bio medical sensing devices.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Solids Content, %	66
Viscosity, Brookfield, 20 °C, mPa·s (cP):	
Speed 20 rpm	20,000
Density, Kg/m ³	1,970
Shelf Life @ 8 to 28°C, days (from date of qualification in original seal)	365
Coverage, m ² /kg:	
Wet product @ 10 µm dry coating thickness	17
Flash Point, °C	62

TYPICAL SCREEN PRINTING PROCESS

• Printing Equipment Type

Manual
Semi-automatic

• Recommended Screen Type

Monofilament polyester screen, threads/cm 68 to 110

• Recommended Squeegee

Polyurethane, durometer 70 to 75

• Emulsion Thickness

Emulsion Thickness, µm 20 to 40

• Applied Dry Coating Thickness

Applied Dry Coating Thickness, µm 7 to 12

TYPICAL DRYING CYCLE

Recommended Drying Cycle

Conventional Air Circulated Oven:

30 minutes @ 80°C or

15 minutes @ 95°C or

15 minutes @ 120°C

LOCTITE EDAG 6038SS E&C can be dried immediately, after printing, at temperatures between 70 to 120°C.

Use jet air and infra-red drying for high speed production.

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

Dry Coating on polycarbonate film dried 15 minutes @ 120°C

Physical Properties

Adhesion, ASTM 3359, grade 5B

Electrical Properties

Sheet Resistance@ 25µm dry coating thickness, ≤0.04 ohms/sq

GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. LOCTITE EDAG 6038SS E&C is supplied ready for use and does not require dilution.
2. Stir LOCTITE EDAG 6038SS E&C prior to each use.
3. Avoid rapid stirring as this causes air entrapment.
4. If dilution is necessary, use Arcosolv PM-Acetate, (1 to 2% by weight).
5. If a gel structure forms after extended storage, the product may be warmed slightly in a water bath (not exceeding 50°C) and stirred.

CLEAN-UP

1. The equipment can be cleaned with MEK, MIBK, Acetone or similar solvents.

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 : 8 to 28 °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

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

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