

LOCTITE EDAG 6037SS E&C

October 2014

PRODUCT DESCRIPTION

LOCTITE EDAG 6037SS E&C provides the following product characteristics:

Technology	Thermoplastic
Appearance	Silver
Filler Type	Silver, Silver chloride blend
Silver : Silver chloride Ratio	3 : 2
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 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 6037SS 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, %	67
Viscosity, Brookfield , 20 °C, mPa·s (cP):	
Speed 20 rpm	27,500
Density, Kg/m ³	1,920
Shelf Life @5 to 25°C, year (from date of qualification in original seal)	1
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
15minutes @ 120°C

LOCTITE EDAG 6037SS 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, <0.12 ohms/sq

GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. LOCTITE EDAG 6037SS E&C is supplied ready for use and does not require dilution.
2. Stir LOCTITE EDAG 6037SS 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 65°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 : 5 to 25 °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

$$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$$

$$\text{kV/mm} \times 25.4 = \text{V/mil}$$

$$\text{mm} / 25.4 = \text{inches}$$

$$\text{N} \times 0.225 = \text{lb}$$

$$\text{N/mm} \times 5.71 = \text{lb/in}$$

$$\text{N/mm}^2 \times 145 = \text{psi}$$

$$\text{MPa} = \text{N/mm}^2$$

$$\text{MPa} \times 145 = \text{psi}$$

$$\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$$

$$\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$$

$$\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$$

$$\text{mPa}\cdot\text{s} = \text{cP}$$

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