

LOCTITE EDAG 5810 E&C

August 2014

PRODUCT DESCRIPTION

LOCTITE EDAG 5810 E&C provides the following product characteristics:

Technology	Epoxy
Appearance (Comp. A)	Silver
Appearance (Comp. B)	Light yellow
Mixing Ratio, by weight Component A: Component B	16 : 1
Product Benefits	• Two component • Room temperature cure • Electrically conductive • Thermally conductive • High strength • Heat resistant
Operating Temperature - Continuous	121°C
Cure	Room temperature and Heat cure
Application	Coating
Filler Type	Silver

LOCTITE EDAG 5810 E&C two-component epoxy adhesive is designed to cure at ambient temperatures.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Component A Properties

Viscosity 700,000, mPa·s (cP)	700,000
Specific Gravity, g/ml	2.7
Solids Content by weight, %	97
VOC, g/l	63
Flash Point - See SDS	

Component B Properties

Viscosity 400, mPa·s (cP)	400
Specific Gravity, g/ml	1.02
Solids Content by weight, %	98.5
VOC, g/l	102
Flash Point - See SDS	

Mixed Properties

Work Life, 100 gram mass, @ 25°C minutes	45
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TYPICAL CURING PERFORMANCE

Cure Schedule

24 hours @ 25°C

Alternate Cure Schedule

2 hours @ 65°C or

1 hour @ 100°C

Cure can be accelerated by exposing the product to elevated temperatures.

It should be noted that conductivity will be improved by curing at elevated temperatures.

The above cure profiles are guideline recommendations. Cure conditions (time and temperature) may vary based on customers' experience and their application requirements, as well as customer curing equipment, oven loading and actual oven temperatures.

TYPICAL PROPERTIES OF CURED MATERIAL

Sample cured 1 hour @ 100°C

Electrical Properties

Volume Resistivity, ohm-cm	0.0007
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TYPICAL PERFORMANCE OF CURED MATERIAL

Sample cured 1 hour @ 100°C

Shear Strength

Lap Shear Strength :

Al to Al	N/mm ²	7
	(psi)	(1,000)

GENERAL INFORMATION

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

DIRECTIONS FOR USE

Mixing/Dilution

1. Gently stir with spatula until the mixture is of a uniform consistency.

Application

1. LOCTITE EDAG 5810 E&C may be applied by syringe dispensing or stencil printing method..

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.

Storage

Store in original, tightly covered containers in clean, dry areas. Storage information may be indicated on the product container labeling.

Optimal Storage : 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.

Conversions

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

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Reference 0.1