

LOCTITE EDAG 5915 E&C

September 2014

PRODUCT DESCRIPTION

LOCTITE EDAG 5915 E&C provides the following product characteristics:

Technology	Epoxy
Appearance	Silver
Filler Type	Silver
Product Benefits	• One component • Conductive • Fast cure
Dispense Method	Stencil print or Dot dispense
Operating Temperature Continuous	160°C
Cure	Heat cure
Application	Conductive Ink

LOCTITE EDAG 5915 E&C epoxy adhesive is designed for bonding surface mount devices to flexible or rigid printed circuits.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Solids Content by Weight, %	92
Viscosity, Brookfield, mPa·s (cP): Spindle 7, speed 20 rpm, @ 25°C	120,000
Density, kg/l	1.97
Shelf Life @-20°C, days (from date of qualification in original seal)	365
Flash Point, Tag Closed Cup Flash Tester, °C	107
VOC, g/l	170
Vapor Pressure @ 20°C, mm Hg	0.05

TYPICAL CURING PERFORMANCE

Recommended Curing Conditions

15 minutes @ 130°C or

10 minutes @ 177°C

The above cure profile is a guideline recommendation. 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

Physical Properties

Coverage @ 1 mil dry film thickness, sq ft/gal	1,320
Extractable Ionic Content, ppm:	
Chloride (Cl-)	<10
Sodium (Na+)	76
Potassium (K+)	36

Electrical Properties

Volume Resistivity, ohm-cm	<0.0005
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TYPICAL PERFORMANCE OF CURED MATERIAL

Miscellaneous

Lap Shear Strength :

Al to Al	N/mm ² 7 (psi) (1,000)
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GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. Mixing/Dilution

- Gently stir prior to use.
- Avoid rapid stirring, as this causes air entrapment.

2. Application

- Many factors influence the film thickness and shape of the deposit. These includes snap-off distance, stencil thickness, squeegee material, or dot dispensing equipment of choice. Stencil printing is recommended for optimum deposit control and registration.
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Recommended Thickness, mils	5 to 10
Stencil Type	brass or stainless steel
Stencil Thickness, mils	8 to 10
Squeegee Type	metal, paste retainer

3. Pick and Place

- Place device atop the wet print.
- Take care to apply just enough pressure to allow the ink to wick onto the leads, but not to displace the ink as to cause bleeding onto adjacent conductive tracks. Pick-and-place equipment can be adjusted to optimize this feature.

4. Thinning and Cleanup

- Uncured resin may be cleaned with Isopropanol, MEK and similar solvents.

Storage

Store product in the unopened container in a cool dry well ventilated area. Storage information may be indicated on the product container labeling.

Optimal Storage: -20°C. Storage below -20°C or greater than -20°C can adversely affect product properties.

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

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

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Reference 0.2