



**Noelle Industries, Inc.**  
Adhesives • Coatings • Conductives • Encapsulants

## NOELLE E903-15

### A One Component Electrically Conductive Liquid Adhesive

#### Description:

Noelle E903-15 is an electrically conductive, one component high performance liquid adhesive for lid sealing and die bonding. Noelle E903-15 can also be used as a structural adhesive for bonding dissimilar substrates. Noelle E903-15 can also be used in screen printing applications.

#### Advantages:

Noelle E903-15 will cure at temperatures above 120°C. Noelle E903-15 features excellent chemical, heat and moisture resistance. It also exhibits class F (155°C) continuous operating service.

#### Shelf Life: (Sealed container)

Three Months @ 25°C  
Six Months @ -10°C  
One Year @ -40°C

#### Physical Properties:

Color:	Silver
Pounds per Gallon	23.97
Specific Gravity	2.88

#### Cure Schedules:

Longer times or higher temperatures will further enhance end properties.

##### Cure Temp:

120°C	150°C	160°C
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##### Cure Time:

60 min.	30 min.	10 min.
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#### Cured Properties:

Shore Hardness, measured @ 25°C:	86D
Volume Resistivity, Ohm-cm @ 25°C:	1 x 10 <sup>-4</sup> *
*(After cure @ 160°C)	
Lap Shear, Tensile Strength:	
Al/Al ASTM D-1002:	>2500 psi.
304SS/304SS ASTM D-1002:	>2900 psi
Coefficient of Linear Thermal Expansion (in/in°C):	70 x 10 <sup>-6</sup>
Glass Transition Temperature (t <sub>g</sub> ):	>140°C
Modulus @ 25°C:	2.18 x 10 <sup>9</sup> Pa
@ 180°C:	2.52 x 10 <sup>7</sup> Pa
Water Absorption (Maximum):	1.2%

**EAll values reported above are typical values, and are reported as a means of reference. Individual testing should be done to determine actual results, tested at specific conditions.**

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