



TECHNICAL DATA SHEET

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
Viscosity, @ 22°C Cone and Plate (cP): 1200

Cure Schedules:

Longer times or higher temperatures will further enhance end properties.

| Cure Temp: | 120°C | 150°C | 160°C |
|------------|---------|---------|---------|
| Cure Time: | 60 min. | 30 min. | 10 min. |

Cured Properties:

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

All 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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