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

# TECHNICAL DATA SHEET

# NOELLE E903-25-2

## A One Component Electrically Conductive Ink

### Description:

Noelle 903-25-2 is a carbon filled, electrically conductive, one component high performance screen printable ink.

### Advantages and Applications:

Noelle 903-25-2 features electrical conductivity and has a desirable viscosity for screen-printing or dot dispensing. Noelle 903-25-2 is designed to be used when superior electrical resistance is not required. Noelle 903-25-2 features excellent screen printability and good adhesion to a variety of substrates such as most metal, including **Nickel**-plated surfaces, polyester film, phenolic, and ceramic. Noelle 903-25-2 has been modified to improve shock resistance during Thermal Shock Testing. Applications include membrane switches, flexible circuits and RFI shielding.

### Physical Properties:

| | |
|---|---|
| Color: | Black |
| Specific Gravity | 1.05 |
| Pounds per Gallon | 8.70 |
| Viscosity @ 25°C (cP): | 120,000 ± 20,000 |

**Shelf Life:** (Sealed container)

Three Months @ 25°C
Six Months @ 0°C
One Year @ -40°C

### Viscosity Adjustment:

Solvent used is Butyl Cellosolve Acetate

### 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. |

### Instructions for use:

If thickening occurs by solvent loss or if a lower viscosity is desired for spray or other applications, thin with Butyl Cellosolve Acetate. The solvent thinned compound will result in a cured film with a higher sheet resistivity and should be used promptly or periodically agitated to avoid filler settling,

### Cured Properties:

| | |
|---|---|
| Glass Transition Temperature ($t_g$): | 115°C |
| Sheet Resistivity, @ 25°C (Ohm / Sq / Mil): | <10 |
| @ 175°C After 15 min | <5 |
| Lap Shear, Tensile Strength Al/Al ASTM D-1002 (psi): | >1000 |

**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.**

• **76 Treble Cove Road, Building # 3, Unit C, North Billerica, MA 01862**

• **Phone: (978) 439-9841** • **Fax: (978) 439-9842** • **Website: www.noelleindustries.com** • **email: info@noelleindustries.com**