



TECHNICAL DATA SHEET

Noelle Industries, Inc.

Adhesives • Coatings • Conductives • Encapsulants

NOELLE E903-18 System

A Two-Component Electrically Conductive Liquid Adhesive

Description:

Noelle E903-18 System is a two-component (A + B), high performance electrically conductive, room temperature or mild heat curing liquid epoxy hybrid adhesive. Noelle E903-18 System is designed for use in applications that requires a flexible material for gasket or RF shielding. Noelle E903-18 can also be used in applications that have sensitive or fragile components or fine electrical wires.

Advantages:

Noelle E903-18 mixed system features a low mixed viscosity for ease of application. Noelle E903-18 also has a convenient working life.

Shelf Life: (Sealed containers)

One Year @ 25°C (both A+B). Hand agitation of the Rein component is recommended after long standing to insure best results.

Physical Properties:

	<u>Resin</u>	<u>Hardener</u>
	E903-18A	E903-18B
Color:	Silver	Light Yellow
Specific Gravity:	3.33	1.00
Mix Ratio		
(By Weight):	100	6.5

Instructions:

Combine the Resin and the Hardener in the ratio listed above. Mix by hand or mechanical mixer until material is uniform in appearance.

Cure Schedules:

Overnight or 16 hours @ 25°C (77°F) will yield 80% of the systems full potential. An additional 96 hours @ 25°C (77°F) will yield the systems full potential.

% Full Cure	80%	100%
Cure Temp:	25°C	25°C
Cure Time(Hours):	16	112

Pot Life (2 pound mass) @ 25°C = 45 min

Cured Properties:

Shore Hardness, measured @ 25°C:	>80A
Volume Resistivity, @ 25°C (Ohm-cm):	2 x 10 ⁻² *
	@ 80°C *(After cure)
Lap Shear, Tensile Strength	
Al/Al ASTM D-1002(psi):	>1800
304SS/304SS ASTM D-1002(psi):	>2400
Coefficient of Linear Thermal Expansion	
(in/in°C):	70 x 10 ⁻⁶
Glass Transition Temperature (t _g):	<60°C
Operating Temperature Range:	-20°C to +100°C

Storage and Handling:

Normal storage and handling is at room temperature. Use standard mixing and housekeeping procedures to minimize the risk of spills and contact with the surrounding materials.

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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