



# TECHNICAL DATA SHEET

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

## NOELLE 805-94

### A Two Component Epoxy Adhesive

#### Description:

Noelle 805-94 System is a two component (A + B) medium viscosity, unfilled epoxy system designed for adhesive and coating applications, that either meets or exceeds the requirements for FDA approval to CFR21 chapter 1, Sections 175.105 and 175.300 and has been tested and certified to meet USP Class VI requirements.

#### Advantages and Applications:

Noelle 805-94 features a moderate cure time and a convenient mix ratio. Noelle 805-94 is a durable adhesive that bonds to a variety of substrates and dissimilar materials. Noelle 805-94 System is 100% solids and undiluted which yields very low vapor transmission. Applications include medical devices, general purpose metal to metal bonding. Noelle 805-94 is resistant to galvanic corrosion, fuels, and mild acids.

#### Physical Properties:

	<u>Resin</u>	<u>Hardener</u>
	805-94A	805-94B
Color:	Clear	Amber
Specific Gravity	1.16	0.98
Combined	1.07	
Viscosity (cP):	14,000	14,000
Mix Ratio		
(By Volume)	1.0	0.85
(By Weight)	100.0	100.0
<b>(May also be used at 1 to 1 by weight)</b>		

#### Shelf Life: (Sealed containers)

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

#### Instructions:

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

#### Cure Schedules:

Within a 10 hour period after application @ 25°C will yield 80% of the systems full potential. An additional 6 hours @ 25°C will yield the systems full potential. Post curing or forced air curing for 2 hours at 65°C will yield a full cure and eliminate the additional waiting time at ambient temperature.

% Full Cure:	80%	100% <b>or</b>	100%
Cure Temperature:	25°C	25°C	65°C
Cure Time (hours):	10	16	2

**Pot Life** (450 grams) @ 25°C = 90 minutes

#### Cured Properties:

Shore Hardness, measured @ 25°C:	>70D
Dielectric Strength (Volts per mil):	440
Lap Shear, Tensile Strength	
Al/Al ASTM D-1002 (M Pa):	34
Compressive Strength (M Pa):	66
Flexural Strength (M Pa):	54
Coefficient of Linear Thermal Expansion	
(cm/cm/°C):	60 x 10 <sup>-6</sup>
Cured Shrinkage:	0.001 in/in
Operating Temperature Range:	0°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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