



TECHNICAL DATA SHEET



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

NOELLE 804-49

A One Component Structural Epoxy Adhesive

Description:

Noelle 804-49 is a one component, aluminum filled, high temperature, non sag, structural epoxy adhesive. Noelle 804-49 was specifically engineered to meet the rigorous requirements of bonding materials to metal housings. Even the most difficult zinc phosphate surfaces have been successfully bonded using this adhesive. Noelle 804-49 can also be used as a structural adhesive for bonding dissimilar substrates. Noelle 804-49 is the convection oven version of 804-18

Advantages:

Noelle 804-49 offers excellent thermal stability over a broad temperature spectrum. High bond strength in the 120-180°C range; It features excellent solvent, water, and salt resistance; flexibility, as well as impact resistance; and thermal conductivity are some of the unique attributes of this adhesive.

Physical Properties:

Color:	Metallic gray
Pounds per Gallon	12.0
Specific Gravity	1.44

Shelf Life: (Sealed container)

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

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.	15min.

Cured Properties:

Shore Hardness:	85D @ 25°C	75D @ 121 °C
Lap Shear,	Al/Al ASTM D-1002:	3170 psi.
	304SS/304SS ASTM D-1002:	4000 psi
Tensile Strength		>6400 psi
Coefficient of Linear Thermal Expansion (in/in°C):	7.0 x 10 ⁻⁵	
Glass Transition Temperature (t _g):	>120°C	
Sag Resistance mils(TP 102)	Initial @ 160 °C	370-400
	After 4 days @ 40 °C	440
Press Flow at 42.5 psi @ 25°C (TP 101)	60 – 80 secs.	
	After 4 days @ 40 °C	70 – 90 secs.
Water Absorption	<0.5 %	

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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