



TECHNICAL DATA SHEET

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

NOELLE I805-98

A One Component Encapsulant and Insulating Compound

Description:

Noelle I805-98 is a one component high performance liquid adhesive for lid sealing and die bonding. Noelle I805-98 can also be used as a B stage structural adhesive for bonding dissimilar substrates.

Advantages:

Noelle I805-98 will cure at temperatures as low as 120°C. It features excellent chemical, heat and moisture resistance, and also exhibits class F (155°C) continuous operating service.

B Stage:

Apply adhesive to substrates to be bonded and Gel adhesive @ 105°C for ten minutes or until adhesive is dry and tack free to the touch. These parts or assemblies may be stored in a sealed environment until full cure or final assembly is required. Then followed recommended cure schedule listed on this technical bulletin

Physical Properties:

Color: Ivory
Pounds per Gallon: 9.33
Specific Gravity: 1.12

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 Temperature:	120°C	150°C	160°C
Cure Time (minutes):	60	30	10

Cured Properties:

Shore Hardness, measured @ 25°C: 85D
Volume Resistivity @ 25°C (Ohm/cm): 1.0×10^{13}
@ 130°C (Ohm/cm): 4.0×10^{11}
Lap Shear, Tensile Strength
Al/Al ASTM D-1002 (psi): >2500
Coefficient of Linear Thermal Expansion
(in/in°C): 70×10^{-6}
Dielectric Strength @ 25°C (VPM): 470
Dissipation Factor @ 25°C (100 Hertz): 0.079
Glass Transition Temperature (t_g) (°C): >140
Modulus @ 25°C (Pa) 2.2×10^9
@ 180°C (Pa) 2.5×10^7
Water Absorption 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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