



PNE-47850

C6-57619A
C6-57620B

DEFINITION

PNE-47850 is a water white / clear low viscosity versatile epoxy casting system that exhibits low thermal expansion. This product is designed for use in a two to one volumetric mix ratio, side by side dispensing system (50ml cartridge +). It is recommended for small electrical/electronic casting and encapsulating applications that require a unique combination of excellent wetting, flow, good thermal expansion properties, thermal shock resistance, and outstanding electrical properties.

PRODUCT DESCRIPTION

| | |
|---|--------|
| Appearance | Liquid |
| Odor | Faint |
| Color (May be modified to meet your requirements) | CLEAR |

| Property | Result | Methods |
|-----------|-------------|--|
| Viscosity | 9,000 mPa·s | Brookfield RVT, Spindle 27, Small Sample Adaptor, 10 rpm, 25°C |

| Other information | | | |
|--|---|---------------|--------------|
| Work life time @ 25 ± 2°C | 20 minutes (viscosity doubles) | | |
| Gel Time @ 25°C | 30 minutes (depending on mass and substrates) | | |
| Full Cure Time @ 25°C | 24 hours | | |
| Fixture/Handling Time @ 25°C | 30 minutes | | |
| Fixture/Handling Time @ 65°C | 10 minutes | | |
| Mix Ratio: | By weight: | Part A 100 | Part B 43 |
| | By Volume: | Part A 100 | Part B 50 |
| Possible curing cycles | 24 hours at 25°C 10 minutes @ 65°C (150°F) | | |
| Specific gravity @ 25°C (g/cm ³) | 1.2 | | |
| Storage stability (unmixed) | 1 year at room temperature | | |



APPLICATION PROPERTIES

- **PNE- 47850**, when fully cured, is highly resistant to moisture, hot water, steam, hot antifreeze solutions, automotive fluids, detergents, gasoline, hydraulic fluids, plasticizers, cleaning agents, acids, and bases.
- **PNE-47850** is highly resistant to vibration and can be thermal cycled between -40 and 150°C.

TYPICAL PROPERTIES OF CURED PNE-47850

The properties set out below were determined following measurements carried out in the laboratory over a small number of tests. They are values given by way of guidance, and do not constitute a guarantee. It will be for the user, in all cases, to carry out their own tests to determine whether the **PNE-47850** resin can be used for the particular application the user has in mind.

PHYSICO-CHEMICAL PROPERTIES

| Properties | Methods | Units | Typical values |
|-----------------------------|------------|-------|----------------|
| Cure 1 hours @ 65°C (150°F) | | | |
| Shore D hardness | ASTM D2240 | ----- | 90 |
| Lap shear to Al | ASTM D3163 | psi | 2500 |

ELECTRICAL PROPERTIES

| Properties | Methods | Units | Typical values |
|---|-----------|-------|--|
| Volume Resistivity <ul style="list-style-type: none"> • 100 V • 500 V | ASTM D257 | Ω-cm | <ul style="list-style-type: none"> • 8.0 x 10¹⁴ • 6.3 x 10¹⁴ |
| Dielectric Constant <ul style="list-style-type: none"> • 120 Hz • 1000 Hz | ASTM D150 | -- | <ul style="list-style-type: none"> • 4.3 • 4.3 |
| Dissipation Factor <ul style="list-style-type: none"> • 120 Hz • 1000 Hz | ASTM D150 | -- | <ul style="list-style-type: none"> • 0.002 • 0.002 |

PRECAUTIONS IN USE

Refer to the attached material safety data sheet.

PACKAGING

PNE-47850 is available in two component kits, and twin syringe cartridges like Mixpac™.

For sizes and part numbers, contact Protavic America, Inc.

The information contained in this data sheet corresponds to the present state of our knowledge; it is intended for your guidance but we are not bound by it since we are not in a position to exercise control over the manner in which our products are used. Moreover; the attention of the user is drawn to the risks that could possibly occur should a product be used for an application other than that for which it is intended.

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