

PRODUCT CODE: C220045

POLYPLEX 916 CIPP NZ RESIN is a medium reactivity, pre-promoted, isophthalic, unsaturated polyester resin dissolved in styrene. It has been specifically designed for Cured in Place Pipe (CIPP) re-lining applications. The resin contains a mineral filler, and shows a long initiated pot life at room temperature, and rapid cure at elevated temperatures.

FEATURES

- Rapid cure at elevated temperatures
- Long catalyzed pot life at room temperature
- Excellent hydrolysis resistance
- Contains mineral filler
- High tensile elongation

BENEFITS

- Positive cure achievable in CIPP applications.
- Suitable for operations where delays occur between pre-impregnation of CIPP liners and pipeline installation.
- Cured resin suitable for continuous water contact in service
- Reduces exotherm in thick composite liner sections.
- High durability, toughness

SUGGESTED USE

Product is specifically designed and refined for Cured in Place Pipe (CIPP) re-lining applications

SIMILAR PRODUCTS

Polyplex 916 – C220030 – Shorter gel time version

RECOMMENDED CATALYST

Perkadox 16 / Tertiary Butyl Perbenzoate (TBPB) combination

TYPICAL LIQUID RESIN PROPERTIES

PROPERTY	TYPICAL VALUE	TEST DETAILS
Viscosity @ 25°C	40000 – 60000 cP 4000 – 6000 cP	Brookfield LV sp.4/0.6 rpm Brookfield LV sp.4/60 rpm
Geltime @ 60°C (SPI reactivity)	18 - 25 minutes	*134 g resin, 1 g Perkadox 16, 0.5 g TBPB
Catalysed Stability (25°C)	48 hours minimum	*134 g resin, 1 g Perkadox 16, 0.5 g TBPB
Shelf Life	6 months	When stored in original closed container in the shade

* added as a preblended catalyst mix: 134 grams resin + 2.5 g Catalyst Mix.
Catalyst Mix: 1 g Perkadox 16 / 0.5 g TBPB / 1 g styrene

TYPICAL CAST RESIN PROPERTIES

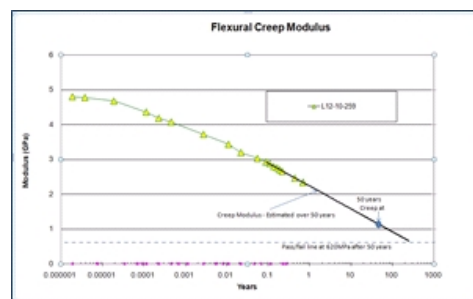
PROPERTY	TYPICAL VALUE	TEST DETAILS
Barcol Hardness	40 – 45	Barcol 934 Impressor
Tensile Strength	68.9 MPa	ISO 527
Flexural Strength	131.5 MPa	ISO 178
Flexural Modulus	3.0 GPa	ISO 178
Elongation at break	3.9%	ISO 527
Heat Distortion Temperature	90.4°C	ASTM D648

Cast resin was prepared using 1.5 w/w% MEKP NR20. Cured at room temperature for sixteen hours then post cured for three hours at 105°C. Properties refer to castings prepared from unfilled base resin, at 60% solids content.

ADDITIONAL INFORMATION

The graph below shows Flexural Creep Modulus results over time for cured Polyplex 916 (lab ref: L12-10-259).

The most linear portion of the graph is extrapolated to determine the predicted Creep modulus after 50 years. For compliance with typical CIPP industry requirements, the extrapolated modulus value must be greater than 620 Mpa at the 50 year mark. This data confirms compliance of Polyplex 916 with these requirements.



STORAGE AND HANDLING

To ensure maximum stability and maintain optimum resin handling properties, polyester resins should be stored in closed containers, away from heat sources and sunlight. The resin should be stored away from all sources of ignition. Stored resin quantities should be kept to a reasonable minimum and used on a first in/first out stock rotation basis. Prolonged storage, or unfavourable storing conditions, may cause separation, therefore agitation of the resin before use is recommended.

STANDARD PACKAGING

Mild steel drums (Open Head)
Mild steel pails

Always refer to the MSDS before use.