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PC410 A&B Liquid Encapsulant

Low Viscosity Thermally Conductive

TECHNICAL DATA SHEET 706

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DESCRIPTION

PC410 is a highly filled epoxy resin designed for potting and encapsulation where high thermal conductivity is required. It is a liquid encapsulant formulated to have excellent moisture resistance, low CTE and to cure to a high finished strength.

PC410 has been tested in our laboratories to be UL 94V-0.

PC410 will be completely cured in 5-7 days at room temperature but can be accelerated with mild heating of 60°C to 100°C for 2-4 hours.

PC410 can be used with a variety of curatives to achieve a diverse range of cured and handling properties.

UNCURED PROPERTIES

Color White Liquid

Specific Gravity @ 25°C

Part A 2.75

Part B 0.95

Part A&B 2.67

Viscosity (RVDV-II+, Spindle 7 @ 10 rpm @ 25°C)

Part A 600,000 cps

Part B 10 cps

Part A&B 35,000 cps

Filler Content 76.0%

Storage Life >12 months @ 25°C

PROCESS PARAMETERS

In order to obtain a uniform and stoichiometrically correct mixture, PC410A should be mixed prior to use as the material may settle over time.

In order to achieve a correct mix ratio a scale or balance should be used to proportion out the Part A and Part B.

The material needs to be mixed thoroughly, scraping all sides and bottom of the container, as even small amounts of unmixed materials can cause irregularities of the cured and finished product.

HANDLING PROPERTIES

Mix Ratio per 100 parts A

by Weight B 1.5

by Volume B 4.5

Pot Life @ 25°C >90 minutes

Gel Time 2 hours

CURED PROPERTIES

Hardness 93 Shore D

Thermal Conductivity 1.4

Tg by DMA 85°C

STORAGE AND HANDLING

Shipping Recommended temp. is room temperature

Storage Store at 25°C for up to 12 months

Safety Refer to MSDS for details

All values are considered typical based on tests believed to be accurate. Polysciences, Inc. may change data as appropriate.

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