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TECHNICAL DATA SHEET 845

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Thermally Conductive Epoxy PC420 A&B

DESCRIPTION

PC420A&B is an epoxy-based product designed for bonding, potting and encapsulation where high strength and thermal conductivity are required. It is particularly useful for the assembly of components requiring heat dissipation. **PC420A&B** cures at room temperature and has a convenient easy to use mix ratio of 2:1. The product is ceramic, non-metal filled. It will cure in 2-3 days at room temperature but can also be cured by heating to 100°C for 1 hour, or 80°C for 2 hours.

UNCURED PROPERTIES

	Part A	Part B	Mix
Type	Epoxy	Amine	
Color	Dark Gray	White	Gray
Specific Gravity	1.45	1.70	1.53
Viscosity@ 25°C, cps	35,000	50,000	40,000

PROCESS PARAMETERS

This product is best dispensed through a static top mixer. The absence of visible white streaks in the mixture is a good indication of complete mixing of the components.

Mix Ratio

	Part A	Part B
By Weight	100	58
By Volume	2	1

Mixed Product

Pot Life @ 25°C	60 minutes
Gel Time @ 25°C	90 minutes

CURED PROPERTIES

Property	Units	Value
Hardness@25°C	Shore D	88
Hardness@100°C	Shore D	50
Adhesive Strength to Aluminum	Psi	1800
Thermal Conductivity	w/m.K	1.25
Volume Resistivity	Ohm-cm	>10 ¹⁵
Temperature Range of Use	°C	-50 to 120

(Under low stress conditions, or through intermittent exposures, the material is suitable through +150°C)

STORAGE AND HANDLING

Shipping	Room temperature
Storage	Room temperature
Safety	Refer to MSDS for details

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

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