



PT1945

Durable High Temperature Epoxy Surface Coat

DESCRIPTION

PT1945 is a black, high temperature epoxy surface coat system with special characteristics developed for prepreg layup tools. PT1945 is a very tough material that is highly resistant to cuts and abrasion. This hard surface helps to eliminate the tool damage that is caused by cutting prepreg right on the tool surface. PT1945 has very good heat resistance for long life in constant production cycling applications.

Two hardeners are available for use with PT1945 that give different handling properties and working times. Thus, a range of applications can be satisfied by switching hardeners to fit the requirements. The hardeners listed here are low toxicity products. They do not contain methylene dianiline (MDA), or any aniline derivatives. They are non-staining materials, and will not crystallize in normal shipping and storage conditions.

PRODUCT SPECIFICATIONS

	PT1945 A	PT1945 B	PT1945 B1	ASTM Method
Color	Black	Amber	Amber	Visual
Viscosity,	Light Paste	1700 cps	1200 cps	D2392
Specific Gravity, gms./cc	1.53	1.09	1.0	D1475
Mix Ratio		100 : 10	100 : 11	PTM&W
Pot Life, 4 fl.oz. Mass @ 77°F		40-45 min	90-120 min	D2471

HANDLING and CURING

When using PT1945 with either Part B or Part B1 hardener, the material will gel hard at room temperature, and then may be given a post cure by the recommended schedule for the laminating system being used

PACKAGING WEIGHTS

	Gallon Kit	Pail Kit
PT1945 Part A	11 lb.	55 lb.
PT1945 Part B	1.1 lb.	5.5 lb.
PT1945 Part B1	1.25 lb.	6.1 lb.
PT1945 A/B Kit	12.1 lb.	60.5 lb.
PT1945 A/B1 Kit	12.25 lb.	61.1 lb.

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TYPICAL MECHANICAL PROPERTIES

	PT1945 A/B	PT1945 A/B1	ASTM Method
Mix Ratio, By Weight	100 : 10	100 : 11	PTM&W
Color	Black	Black	Visual
Mixed Viscosity, centipoise	144,000 cps	168,000 cps	D2393
Pot Life, 4 fl. Oz. Mass, @77°F	40-45 min.	90-120 min.	D2471
Cured Hardness, Shore D	90 Shore D	90 Shore D	D2240
Specific Gravity, grams, cc	1.48	1.46	D1475
Glass Transition Temperature, DSC: T _g (Peak)	295°F	345°F	D3418
Coefficient of Thermal Expansion, Range 50°C to 100°C	2.20 x 10 ⁻⁵ in/in/ °F	2.51 x 10 ⁻⁵ in/in/ °F	D696

SAFETY and HANDLING

PTM&W epoxy products are made from raw materials carefully chosen to minimize or even eliminate toxic chemicals, and therefore offer the user high performance products with minimum hazard potential when properly used. Generally, the PTM&W epoxy resins and hardeners will present no handling problems if users exercise care to protect the skin and eyes, and if good ventilation is provided in the work areas. However, breathing of mist or vapors may cause allergenic respiratory reaction, especially in highly sensitive individuals. As such, avoid contact with eyes and skin, and avoid breathing vapors. Wear protective rubber apron, clothing, nitrile rubber gloves, face shield or other items as required to prevent contact with the skin. In case of skin contact, immediately wash with soap and water, followed by a rinse of the area with vinegar, and then a further wash with soap and water. The vinegar will neutralize the hardener and lessen the chances of long term effects. Use goggles, a face shield, safety glasses or other items as required to prevent contact with the eyes. If material gets into the eyes, immediately flush with water for at least 15 minutes and call a physician. Generally, keep the work area as uncluttered and clean as possible, and clean up any minor spills immediately to prevent accidental skin contact at a later time. Keep tools clean and properly stored. Dispose of trash and empty containers properly. Do not use any of these types of products until Material Safety Data Sheets have been read and understood.

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