

Description

PT 610 is a low viscosity, flame retardant and two-part potting compound based on epoxy resins. When fully cured the surface is glossy, blush free and hard. It has very good scratch and water resistance. This system has enhanced adhesion and wets glass, ceramics, most plastics and metals well. The mixed epoxy has low viscosity to ensure good flow, good seepage into every corners and minimal trapping of bubbles.

Features

- Room temperature cure (25°C)
- Vertical flame rating UL94-V0.

Applications

- Potting or back-fill epoxy for electrical and electronic devices.

Uncured Properties	Typical Value	Unit	Test Method
Appearance (Part A)	Black liquid	-	PEN 10
Appearance (Part B)	Clear yellowish liquid	-	PEN 10
Appearance (Mixed)	Black liquid	-	PEN 10
Viscosity at 25°C, Part A CP25-1 @3s ⁻¹	286,564	cP	PEN 144
Viscosity at 25°C, Part B CP25-1 @6667s ⁻¹	16	cP	PEN 144
Viscosity at 25°C, Mixed CP25-1 @133s ⁻¹	3137	cP	PEN 144
Mix ratio (A:B) by weight	8:1	-	N/A
Pot life, 25°C	1	Hour	PEN 26
Shelf life Part A and B, 25°C	12	Month	PEN 26

Cured Properties		Unit	Test Method
Hardness, cured 25°C for 24 hours	80	Shore D	ASTM D2240
Glass transition, Tg cured 25°C for 3 days	54	°C	PEN 64
CTE before Tg	35	ppm/ °C	PEN 64
CTE after Tg	97	ppm/ °C	PEN 64
Vertical flame rating	V-0	-	PEN 55

* The values above are tested based on batch to batch basis. These values are not used as a basis for preparing specifications.

* PEN is referring to Penchem's standard test method; ASTM is for test reference only.

* N/A is referring to not applicable.

Guideline of Use

Direction for use

- 1) Premix content of Part A before use to ensure uniformity. Some light settling may occur especially in Part A, but it will be soft and easily reincorporated.
- 2) Mix Part A resin and Part B hardener in the ratio of 8:1 by weight. Be careful to scrape sides and bottom of container to incorporate all unmixed material.
- 3) Degas thoroughly in a vacuum chamber. Continue defoaming until no bubbles observed.
- 4) Apply the product on area to be filled. This product may be dispensed with a variety of manual and automatic applicators or other equipment as required. The user is responsible to determine the suitability of the product for all intended uses.
- 5) It is recommended to use the product within pot life which varies by different environment condition and application. The pot life is more than 60 minutes. Processing or pouring the mixed epoxy after 1 hour may tend to trap bubbles.
- 6) The substrate should be clean and free from grease, mold release, or other contaminants prior to dispensing the adhesive. Blowing hot air over the surface of the epoxy can break any bubbles formed during mixing. Wipe off any excess uncured epoxy with a piece of dry cloth or tissue. Further cleaning may be achieved with tissue wetted with IPA.
- 7) The epoxy will harden in 24 hours. Full hardness will be achieved in 3 days. Faster curing can be achieved at elevated temperatures, eg. 80°C for 1 hour.

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Recommended Cure

Cure condition:

25°C /24hours, 80°C/1hr

Cure time will be varying at different cure temperature.

Storage & Shelf Life

This product has a 12 months shelf life from date of manufacturing, unless otherwise specified, when stored in a cool and dark place in the original and unopened container.

This product has a tendency to settle upon shipment or storage. The product should be re-mixed well prior to use. Store material in a cool and dark place.

Environment, Health & Safety

This product is intended for industrial use only. For more safety information, please refer to Product Safety Data Sheet (SDS).

Packaging

- 1kg plastic pail
- 5kg plastic pail

Other packaging enquiry, please contact our sales department.

General Information

All right reserved. This information in this document is subjected to change without notice.

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