



TECHNICAL DATA

NP1084

FLAME RETARDANT POLYURETHANE SYSTEM

Fully RoHS Compliant containing no heavy metals

Product Description

NP1084 is a two-part polyurethane resin system. The mixed system has a low, penetrating viscosity and a long pot life. The cured resin has flame retardancy equivalent to UL 94 V-0, and has excellent electrical properties. The resin has very good adhesive characteristics to a wide range of substrates. NP1084 is more flexible and slower curing than NP1064.

The LED Range of Resins

The electronics and the power supplies behind the LEDs require advanced resins for protection. The NP1084 polyurethane system offers a cost-effective solution to power supply problems. The low penetrating viscosity (30 poise) prevents voids formation that would inhibit performance in high voltage transformers. The electrical properties (15 kV/mm electric strength) and physical flexibility ensure that the NP1084 is not only cost effective but an excellent resin for a wide range of power products.

Features

- * UL 94 V-0 Flammability Performance
- * Low Mix Viscosity
- * Excellent Electrical properties
- * Contains No Heavy Metal Catalysts
- * Very Good Adhesion
- * Long Pot Life

Applications

- * Assemblies
- * Power Supplies
- * Ballasts
- * Drivers

Typical Uncured Physical Properties

Property	Base	Hardener	Mixed System
Viscosity (mPas)	8000	70	3000
Colour	White	Brown	Beige
Specific Gravity	1.62	1.24	1.55
Mix Ratio	7.0	1	By Weight
	5.4	1	By Volume



Pot Life	20-25 Minutes	200 g @ 23°C
Usable Life	40 Minutes	200 g @ 23°C
Gel Time	90 Minutes	200 g @ 23°C
Complete Cure	48 Hours	200 g @ 23°C

Typical Cured Properties

Property	Result	Units
Operating Temperature	-40 to +130	°C Continuous
Shore A Hardness	95	
Shore D Hardness	45	
Electric Strength	15	kV/mm
Comparative Tracking Index	>850	V
Flammability	Self-Extinguishing	To UL 94 V-0 Level
Deflection Temperature	-20	°C (Approx)
Thermal Conductivity	0.9	W/mK
Water Absorption	0.7	% (30 days at 23°C)

Note: The above technical information and data should be considered representative or typical only and should not be used for specification purposes.



Supply	Details
Twinpacks	Ideal for mixing without the entrapment of air.
Kits	The resin base and hardener are supplied in two separate containers, pre-weighed to facilitate accurate mixing for larger applications.
Bulk	The NP1084 system is formulated to prevent sedimentation on storage. However, storage at higher ambient temperatures (above 25°C for instance) or for long times, can cause some settlement. It is important that any sediment is redispersed into the bulk resin prior to using the resin. This can be done by stirring with a long spatula.
Shelf Life	The materials should be stored in the original unopened containers under cool dry conditions at temperatures between 10 and 25°C. The shelf life is one year. Opened containers should be resealed.



Precautionary Information

Refer to Product Label and Material Safety Data Sheet for health and safety information before using this product. All Products should be used in accordance with your own COSHH Assessments. For additional health and safety information, call 01373 858234.

Technical Information

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