

Temperature Technology Ltd.

"A Specialist Company supplying Consumable Component Parts
& Welding/Production equipment
to the Temperature Sensor Industry Worldwide"



Epoxy Resin PX900D/BK Operations & Instruction Manual

Whatever stage of development your production line is in, TTL have the products to help you produce temperature sensors quicker, easier and more efficiently.



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TECHNICAL DATASHEET PX900D/BK

PX900D is a low viscosity unfilled epoxy resin system designed for use in the electronics industry for applications requiring high levels of insulation resistance, chemical resistance and elevated temperature use.

Capable of room temperature curing, the resin exhibits relatively high heat distortion temperatures.

METHOD OF USE

Twinpacks

Twinpacks contain evacuated resin and are ready for use immediately after mixing. See separate mixing instructions.

Bulk Material

The resin is supplied after being evacuated and care should be taken when mixing with hardener not to stir in large amounts of air. If this is unavoidable, the mixed resin and hardener should be re-evacuated before use.

Mixing and dispensing machinery is available which will mix resin and hardener in the correct proportions without any risk of introducing entrapped air.

Kits

In kit form, resin and hardener are provided in separate containers to the correct ratio. In most cases, pour the hardener into the larger resin container and use it as a mixing vessel. Stir well using an appropriate mixer until homogeneous.

Note: Incomplete mixing will be characterised by erratic or even partially incomplete curing of material even after extended time periods.

Characteristics of Resin: RX900D

Property	Value
Colour	Black
Specific Gravity	1.16 ± 0.02
Viscosity	1250

BK Characteristics of Hardener: HX900D

Property	Value	Unit	Standard
Colour	Clear Amber	—	RTM : 10
Specific Gravity	1.00 ± 0.02	—	RTM : 3
Viscosity	60	mPa.s	RTM : 8

Characteristics of Mixed System: PX900D/BK

Property	Value	Unit	Standard
Colour	Black	—	RTM : 10
Specific Gravity	1.10 ± 0.02	—	RTM : 3
Viscosity	650	mPa.s	RTM : 8
Mix ratio by weight	100 : 38	—	—
Mix ratio by volume	100 : 47	—	—
Gel Time (no flow) 50g @ 25°C	3 – 4	Hours	RTM:15
50g @ 40°C	40 - 60	Minutes	—

Cure schedule:	Minimum Cure	Full Cure
	24hr @ 25°C	7 days @25°C
	2 hr @ 60°C	8 hr @ 60°C
	1 hr @ 80°C	4 hr @ 80°C

Storage of Bulk Resin and Hardener

Cold temperatures between 7 and 10°C - can be used to lessen any separation of resin ingredients, however, care, must be taken to prevent condensation by allowing contents to return to ambient temperature prior to opening containers. The preferred storage temperature is between 10 and 20°C. Under these storage conditions the shelf life of the resin and the hardener is 12 months.

Handling Precautions

Epoxy systems may cause sensitisation by "skin contact" and may be corrosive, harmful or toxic. It is therefore advisable that skin and eye contact are avoided by using appropriate personal protective equipment. Adequate ventilation of the working area is recommended. However, where vapour levels are likely to be above occupational exposure limits, or discomfort is experienced, appropriate respiratory protection should be worn.

It is essential that the specific hazards of the system being used be known before handling any material.

Users should familiarise themselves with the Health and Safety information provided by the Company both

in written correspondence and in the information sources listed below.

- The labels on the product packages and containers
- The product Health and Safety Data Sheet

The results and information above does not constitute a specification and is given in good faith and without warranty. The information is derived from test / or extrapolations believed to be reliable and is quoted for guidance only. The product is offered for evaluation on the understanding the customer satisfies himself that the product is suitable for his intended by proper evaluation and testing

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