

PX800F

A very fast curing multi-purpose epoxy adhesive

Application

- Bonding
- Sealing
- Structural support

Key Properties

- Rapid curing
- High adhesion to a wide variety of substrates

Description

- Basic Two-component epoxy system
- Resin RX800F
- Hardener HX800F

Physical Data (approx. – values)	Colour	Specific Gravity	Viscosity (mPas) @ 25°C
Resin	Black	1.18	11500 - 14000
	Clear	1.17	
	White	1.17	
Hardener	Amber	1.13	30000
Composite	Black	1.15	27000
	Clear Amber		
	White		

Cure Schedule (1.5cm bead)	Working Life	Gel Time	Tack Free	Light Handling	Full Cure
Temperature	(minutes)	(minutes)	(minutes)	(hours)	(hours)
RT	5	2-5	9	24	48
Usable life in nozzle	6				

Cure Schedule	Working Life	Gel Time	Light Handling	Full Cure
Temperature	(minutes)	(minutes)	(minutes)	(hours)
2g mass @ RT	3	5	60	12
10g mass @ RT	>2	2-5	10	6
100g mass @ RT	>2	2-5		

*RT is defined as 20-25°C

* Will depend on cross section area and ambient temperature

Cure time will depend on cross sectional area, ambient conditions and mixing method.

The above are typical values and will vary depending on the cured mass and application. Hotter temperatures may be used for faster cure but will result in higher post cure shrinkage and higher cure exotherm. Experimentation and testing is suggested to avoid side effects. For maximum properties a post cure may be required – Contact our technical service department for advice.

Processing

Mix ratio by weight 1:1

Mix ratio by volume 1:1

Typical Properties	Result	Unit
Hardness	75 - 80	Shore D
Dielectric strength (2mm)	20	kV/mm
Tracking Resistance (CTI)	>600	V
Dielectric constant	4.1	50Hz
Volume Resistivity	15 ¹⁰	ohm.cm
Dielectric loss factor Tan delta	0.8	50Hz
Temperature resistance	-55 to +100	°C (application and geometry dependant)

Approvals

RoHS compliant	Yes
UL94 V-0	No
REACH (SVHC concentration)	Refer to SDS

Lap Shear Adhesion

Pre-treatment	Abrasion with 300 grit emery and solvent wipe	Copper to Copper	9 MPa
Aluminium to Aluminium	14.8 MPa	PVC to PVC	4.6 MPa
Stainless Steel to Stainless Steel	13 MPa	Nylon 6 to Nylon 6	2.3 MPa
Cold Rolled Steel to Cold Rolled Steel	10 MPa	Acrylic to Acrylic	3.2 MPa

(1) Substrate failure

Packaging

Alternatives	Twin Cartridge and Bulk Containers
PX800C/NC	Other packaging formats available on request
PX800CL/NC	Thixotropic, reduced slump, Opaque
PX800LM/GY	Low viscosity, clear alternative
	Fast curing Metal Repair Compound

Available through distribution and www.resins-online.com

Cartridge - Part Numbers

PX800F/BK/050TC	PX800F/NC/050TC	PX800F/WT/050TC
PX800F/BK/200TC		PX800F/WT/200TC

It is essential for best results that the cartridge is 'balanced' before use to ensure correct mixing.

Loading the cartridge into the gun before attaching the mixer element and pumping the gun to push a small amount of the contents forward will achieve this. Wipe the excess from the cartridge tip and add the static mixer. The cartridge is now ready for use.

Bulk Materials - Part Numbers

RX800F/BK/5KG	HX800F/NC/5KG
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Both resin and hardener are supplied in 5kg, 25kg and 200ltr drums and fully evacuated and ready for use.

Care should be taken to ensure when mixing the resins air is not entrained in the mixture. If this is unavoidable the mixed resin and hardener should be re-evacuated before dispensing. The bulk resin and hardener materials can be dispensed from suitable dispensing machinery, details provided by Fluid Research on request.

Cleaning

All equipment contaminated with mixed material should be cleaned before the material has hardened. TS130 is a suitable non-flammable cleaning agent, although other solvents may be found suitable. TS130 will also remove cured material provided it can soak for several hours.

Storage and Shelf Life

24 months at 25 °C

Many epoxy resin systems are prone to crystallization as epoxy resin is a super-cooled fluid. This condition may give the product a gritty or grainy appearance (or hazy in clear products). Products in this state will not usually cure to normal and expected properties. In extreme cases it may appear solid and cured. Fluctuating temperatures (within 5 to 50°C) aggravate this phenomenon. Heating the individual component to 50 to 60°C while stirring can usually restore products to original state.

Storage at 25 +/- 10°C is optimum for most products

Some epoxy systems are prone to settling due to high filler content and should be inverted every two to three weeks to reduce the accumulation of the fillers on the bottom of the containers.

Inventory should be rotated on a FIFO (first in, first out) basis.

Health and Safety

Please refer to RX/HX800F Health and Safety data or our Technical Service Department for individual/specific advice.

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The results and information above do 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 the intended application by proper evaluation and testing.

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