

PX800CS

A very fast curing, multi-purpose epoxy adhesive with excellent all-round properties

Application	Key Properties
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| <ul style="list-style-type: none"> Bonding PVC drain Sections Bonding of composites Stone & Aggregate bonding | <ul style="list-style-type: none"> Rapid curing High adhesion to a wide variety of substrates Excellent chemical resistance |
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Description

- Basic Two-component epoxy system
- Resin RX800CS
- Hardener HX800CS

Physical Data (approx. – values)	Resin	Hardener	Composite
Colour	Black Light Yellow	Amber	Black Pale Yellow
Specific Gravity	1.18	1.14	1.15
Viscosity (mPa.s) @ RT	13000	10000	12000

Cure Schedule (1.5cm bead)	Working Life	Gel Time	Tack Free	Light Handling	Full Cure
Temperature	(minutes)	(minutes)	(minutes)	(hours)	(hours)
RT	9	11	14	24	48
Usable life in nozzle	13				

Cure Schedule (50ml)	Working Life	Gel Time	Light Handling	Full Cure
Temperature	(minutes)	(minutes)	(hours)	(hours)
RT*	4	5	6	24
40°C	4		3	12
60°C	2		1	4

*RT is defined as 20-25°C

*2mm cross sectional area

**For maximum properties. The above data is given as a guide only.

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

Approvals

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

Typical Properties	Result	Unit
Hardness	80	Shore D
Operating Temperature	-40 to +120	°C (Application and geometry dependant)
Thermal Conductivity	0.3	W/mK
Tensile Strength	20	mPa
Compressive Yield Strength	< 10	mPa
Coefficient of Linear Expansion	70 - 90	ppm/C
Volume Resistivity	1 x 10 ¹³	ohm.cm
Electric Strength	15	kV/mm
Water Absorption (7 days @ 23°C)	0.80	%

Lap Shear Adhesion

Pre-treatment	Abrasion with 300 grit emery and solvent wipe		
Aluminium to Aluminium	7.6 MPa	ABS to ABS ⁽¹⁾	6.2 MPa
Copper to Copper	9.1 Mpa	Nylon 6 to Nylon 6	2.3 MPa
Stainless Steel	5.8 MPa	Acrylic to Acrylic	3.2 MPa

(1) Substrate failure

Packaging

PX800CS is available in Twin Cartridges and Kits
Other packaging formats available on request

Availability

Available through distribution, www.robnor-resinlab.com & sales@robnor.co.uk

Alternatives

PX800LM/GY Ultra-fast curing Metal Repair Compound

Cartridge Part Numbers

PX800CS/BK/050TC	
PX800CS/NC/050TC	

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.

Kits and Sets Part Numbers

PX800CS/NC/2KGGKIT	
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Kits and Sets are provided in separate containers to the correct ratio.

In Kit form, pour the contents of the smaller container into the larger 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 partially incomplete cure even after extended time periods.

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/HX800CS 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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