

# PX628FF

A flexible, two-part, room temperature curing adhesive

# **Application**

# Bonding of dissimilar materials, particularly metals to plastics

# **Key Properties**

- High adhesion
- Thixotropic
- High impact resistance

# Description

Basic Two-component epoxy system

Resin RX628FFHardener HX628FF

Physical Data (approx. – values)	Resin	Hardener	Composite
Colour	Black	Clear Amber	Black
Coloui	Translucent		Translucent
Specific Gravity	1.20	1.17	1.18
Viscosity (mPas) @ 25°C	Thixotropic	10000	Semi Thixotropic

Cure Schedule (1.5cm bead)	Working Life	Gel Time	Tack Free	Light Handling	Full Cure
Temperature	(minutes)	(minutes)	(minutes)	(hours)	(hours)
RT	14	17	35	4	12
Usable life in nozzle	21				

Cure Schedule (50ml)	Working Life	Gel Time	Light Handling	Full Cure
Temperature	(minutes)	(minutes)	(hours)	(hours)
10°C	6	10	6	24
RT	6-8	8-10	4	12
30°C	4	5	2	6

<sup>\*</sup>RT is defined as 20-25°C

Material used in thick sections could discolour slightly due to exotherm.

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	1.03:1
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	75-85	Shore A
Operating Temperature	-40 to +120	°C (Application and geometry dependant)
Thermal Conductivity	0.3	W/mK
Tensile Strength	6	MPa
Elongation at Break	150	%
Compressive Yield Strength	< 10	MPa
Coefficient of Linear Expansion	70 - 90	ppm/C
Volume Resistivity	13 <sup>10</sup>	ohm.cm
Thixotropy	5-15	mm
Electric Strenath	15	kV/mm

Lap Shear Adhesion	
Aluminium/Aluminium	4.4 MPa
Stainless Steel/Stainless Steel	12 MPa
Cold Rolled Steel/Cold Rolled Steel	6.6 MPa

#### **Packaging**

PX628FF is available in Cartridges

# **Availability**

Available through distribution and www.resins-online.com

Cartridge Mixing - Part Numbers	
PX628FF/BK/050TC	PX628FF/NC/200TC
PX628FF/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.

#### 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.

# **Shelf-life and Storage**

24 months at 25 °C Specialty packaging may be less.

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  $^{\circ}$ C) aggravate this phenomenon. Heating the individual component to 50 to 60  $^{\circ}$ C while stirring can usually restore products to original state. Storage at 25 +/- 10  $^{\circ}$ 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/HX628FF Health and Safety data or our Technical Service Department for individual/specific advice.

#### **Copyright & Warranty - Robnor Resinlab Limited**

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.

#### **Contact Details**

Robnor Resinlab Limited Tel: +44 (0) 1793 823741 31 Athena Avenue Fax: +44 (0) 1793 827033

Elgin Industrial Estate

SwindonEmail:support@robnor.co.ukSN2 8EJWeb:www.robnor-resinlab.comUnited KingdomBuy Online:www.resins-online.com (UK only)