Technical Data Sheet
January 2021

PX628H

A general purpose, two-part, room temperature curing adhesive

Application

- Bonding metal & composite parts

Key Properties

- Excellent adhesion to a wide variety of substrates
- Thixotropic
- High impact resistance
- Long pot-life

Description

- Basic Two-component epoxy system
- Resin RX628H
- Hardener HX628H

Physical Data (approx. – values)	**Resin**	**Hardener**	**Composite**
Colour	Natural	Natural	Natural
Specific Gravity	1.19	0.99	1.09
Viscosity (mPas) @ 25°C	35000-55000	30000-45000	30000-45000

Cure Schedule (1.5cm bead)	**Working Life**	**Gel Time**	**Tack Free**	**Light Handling**	**Full Cure**
Temperature	(minutes)	(minutes)	(minutes)	(hours)	(hours)
RT	150	190	310	24	48
Usable life in nozzle	220				

Cure Schedule (150g)	**Working Life**	**Gel Time**	**Light Handling**	**Full Cure**
Temperature	(minutes)	(minutes)	(hours)	(hours)
10°C			48	72
RT	70-100	120-130	24	48
60°C	30	20-30	16	24

*RT is defined as 20-25°C
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 1.2:1
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	Shore D
Operating Temperature	-50 to +120	°C (Application and geometry dependant)
Thermal Conductivity	0.5	W/mK
Tensile Strength	35	MPa
Compressive Yield Strength	< 10	MPa
Coefficient of Linear Expansion	70 - 90	ppm/C
Volume Resistivity	1.3 x 10^{13}	ohm.cm
Electric Strength	15	kV/mm
Thixotropy	1-4	mm
Water Absorption (7 days @ 23°C)	0.50	%

Lap Shear Adhesion			
Copper to Copper	18 MPa	ABS to ABS	3.1 MPa
Cold Rolled Steel to Cold Rolled Steel	17 MPa	Nylon 6 to Nylon 6	2.1 MPa
Stainless Steel to Stainless Steel	17 MPa	Acrylic to Acrylic	3.2 MPa
Aluminium to Aluminium	12 MPa		

Packaging

PX628H is available in Bulk, cartridges, kits and sets

Availability

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

Cartridge Mixing Part Numbers	
PX628H/NC/050TC	PX628H/NC/400TC
PX628H/NC/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	
RX628H/NC/5KG	HX628H/NC/5KG

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.

Kits and Sets Part Numbers	
PX628H/NC/2KGKIT	PX628H/NC/40KGKIT
PX628H/NC/10KGKIT	

Kits and Sets are provided in separate containers to the correct ratio.
In Kit form, pour the contents of the small 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.

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°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/HX628H Health and Safety data or our Technical Service Department for individual/specific advice.

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