



Description:

This product is a semi-rigid, two-part, room temperature curing adhesive designed for the impregnating and bonding of dissimilar materials.

Features:

- High adhesion
- Non-toxic
- Thixotropic
- High impact resistance
- Fast curing

Specifications:

Colour	: Black
Specific Gravity g/ml	: 1.1
Viscosity m.Pa.s @ 25°C	: 6,000
Mix Ratio by Volume	: 1: 1
Working Life (10g @ 25°C)	: 15 minutes
Gel Time (10g @ 25°C)	: 30 minutes

Cure Schedule:

Initial Cure	Full Cure
90 minutes @ 10°C	48 hours @ 10°C
60 minutes @ 20°C	24 hours @ 20°C
30 minutes @ 30°C	12 hours @ 30°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

Typical Properties:

Shore D Hardness	75	-
Operating Temperature	-40°C to +120°C	(Application and geometry dependant)
Thermal Conductivity	0.3 W/mK	-
Tensile Strength	18 mPa	-
Elongation at Break	5%	-
Compressive Yield Strength	15 MPa	-
Coefficient of Linear Expansion	70 - 90 ppm/C	-
Volume Resistivity	13 Log10ohmm	-
Electric Strength	15 kV/mm	-

Lap Shear Strength:

Aluminium	: 17 Kg/cm ²
Stainless Steel	: 15 Kg/cm ²

Twinpacks:

Twinpacks are pre-weighed resin and hardener components contained in a tough flexible film, separated by a removable clip and rail. Once the clip and rail is removed the resin and hardener can be thoroughly mixed within the bag and is then ready for use. Mixing will normally take ~ 3 minutes depending on the operator and viscosity of the material. Twinpacks are ideal for small to medium production runs, prototyping and on-site or field use. The twinpack weight/volume may also be tailored to a specific size on request.

Bulk Material:

Before use, gentle mixing with a paddle or spatula will homogenise the material and produce a constant end colour. In bulk or kit form evacuation may be necessary for best results.

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 variable/partial cure (even after extended time periods).

Cleaning:

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

Storage and Shelf Life:

Material stored in the original unopened containers under cool dry condition between 10 and 35°C will have a shelf life of at least two years. Once used the containers must be kept sealed to prevent effects from water, air or contaminants.

Health and Safety:

Epoxy resin systems may cause sensitisation by skin contact or inhalation may be corrosive, harmful or toxic. It is therefore strongly recommended that skin and eye contact is avoided by the using of appropriate personal protective equipment such as gloves, safety glasses or goggles and overalls. Wash any contamination from the skin immediately and thoroughly and do not eat, smoke or drink in the working vicinity. Under normal working conditions a good source of ventilation is adequate, however if the material is heated then local exhaust ventilation (LEV) may be required especially for curing ovens.

Part Number Table

Description	Part Number
Potting, Epoxy, Low Viscosity, 50ml	PX771FF

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