

# Technical data sheet



Product: ET5402

Manufacturer: PERMABOND ENGINEERING ADHESIVES

Product group: KLEBSTOFF

Article group: 2-K KLEBSTOFF

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## PERMABOND ET5402

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## **Permabond ET5402 Provisional Data Sheet**

### **General Description**

Permabond ET5402 is a two-part, 2:1 mixable, semi-flexible toughened no slump epoxy adhesive with good adhesion to a variety of substrates such as wood, metal, ceramics and some plastics and composites. Permabond ET5402 forms tough bonds providing high peel resistance and high shear strength coupled with excellent resistance to high temperatures.

### **Physical Properties**

	ET5402A	ET5402B
Chemical type	Epoxy resin	Polyamine hardener
Colour	Black	Black
Viscosity	Thick paste	Thick paste

### **Typical Performance**

Mix ratio	By volume	2:1
Maximum gap fill		5mm
Usable life – 3g A+B	@ 20°C	10 – 12 minutes
Handling time	@ 20°C	30 – 60 minutes
Full cure                      at 25°C at 80°C		4 – 7 days 1 hour
Lap shear strength after 24 hours at 23°C 1 hour cure at 80°C	MPa (mild steel)	10 30
Peel strength after 1 hour cure at 80°C	N/25mm (aluminium)	140-160
Service temperature*		-55 to +150°C

\*Higher temperatures may be endured provided the adhesive is not unduly stressed.

### **Surface Preparation**

Surfaces should be clean, dry and grease-free before applying the adhesive. Permabond Cleaner A is recommended for the degreasing of most surfaces. Some metals such as aluminium, copper and its alloys will benefit from light abrasion with emery cloth (or similar), to remove the oxide layer.

## **Adhesive Application**

- For bulk application ensure the resin and hardener are thoroughly mixed and in the correct proportion.
- Apply the adhesive to one surface and avoid entrapping air.
- Assemble parts applying sufficient pressure to ensure the adhesive spreads to cover the entire bond area.
- Use a jig / clamp to prevent parts moving during cure.
- It is advisable not to disturb the joint until the adhesive is fully cured

## **Storage and Handling**

Storage Temperature    5 to 25°C  
Shelf Life                    12 months

Stored in original unopened containers

Users are reminded that all materials, whether innocuous or not, should be handled in accordance with the principles of good industrial hygiene. Full information can be obtained from the Material Safety Data Sheet.

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