

Features & Benefits

- 💧 Adhesion to a wide variety of substrates
- 💧 Full cure at room temperature
- 💧 Easy to apply
- 💧 High shear and peel strength
- 💧 Good impact strength
- 💧 Good chemical resistance
- 💧 Non-drip rheology

Description

PERMABOND® ET536 is a two-part, 1:1 mixable epoxy adhesive with good adhesion to a variety of substrates such as wood, metal, ceramics and some plastics and composites. Permabond ET536 forms tough bonds providing high peel resistance and high shear strength. The extended work life of this product allows for adjustment and makes it more suitable for larger applications.

Physical Properties of Uncured Adhesive

	ET536A	ET536B
Chemical composition	Epoxy Resin	Polyamine Hardener
Appearance	White	Black
Viscosity @ 25°C	20rpm: 50,000-100,000 mPa.s (CP) 2rpm: 150,000-300,000 mPa.s (CP)	20rpm: 100,000-200,000 mPa.s (CP) 2rpm: 200,000-400,000 mPa.s (CP)
Specific gravity	1.1	1.2

Typical Curing Properties

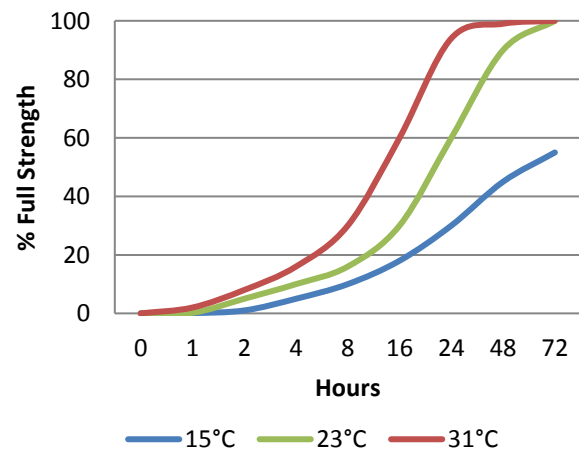
Mix ratio by volume	1:1
Maximum gap fill	5 mm <i>0.2 in</i>
Usable / pot life @23°C	50-80 mins
Handling time @23°C	90-120 mins
Working strength @23°C	24 hours
Full cure @23°C	72 hours

Typical Performance of Cured Adhesive

Shear strength* (mild steel) (ISO4587)	15 - 24 N/mm ² <i>(2200 - 3500 psi)</i>
Peel strength (aluminium) (ISO4578)	60-80 N/25mm <i>(13-18 PIW)</i>
Hardness (ISO868)	65-75 Shore D
Elongation at break (ISO37)	4-8%
Glass transition temperature Tg	45-55°C <i>(113-131°F)</i>
Dielectric strength	15-25 kV/ mm
Thermal conductivity	0.4 W/(m.K)

*Strength results will vary depending on the level of surface preparation and gap.

Strength Development



Graph shows typical strength development of bonded components. An increase of 8°C in temperature will halve the cure time. Lower temperatures will result in a slower cure time.

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