

**Features & Benefits**

- Adhesion to a wide variety of substrates
- Cures at room temperature
- Easy 1:1 mix ratio
- Good resistance to impact and vibration
- Flexible

**Description**

**PERMABOND PT328** is a 2-part, room temperature curing polyurethane adhesive. It is ideal for use on a wide variety of substrate materials including metals, plastics and composites. Its long pot life makes it suitable for covering large areas. It has excellent environmental and chemical resistance.

**Physical Properties of Uncured Adhesive**

	PT328 A	PT328 B
Chemical composition	Polyurethane	Polyurethane
Appearance	Black	Amber
Viscosity @ 25°C	3000-6000 mPa.s	3000-6000 mPa.s
Density	1.25	1.25

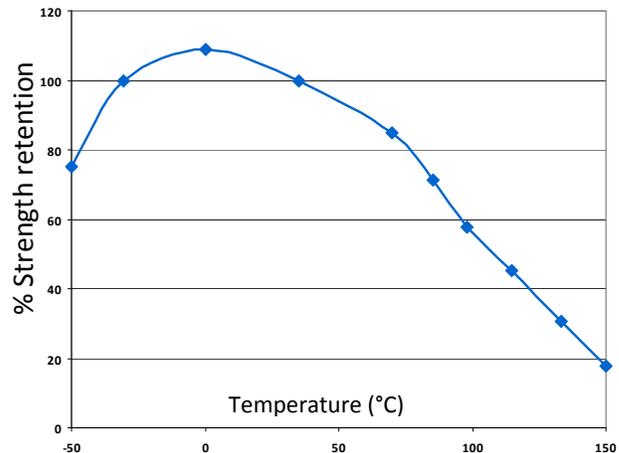
**Typical Curing Properties**

Ratio of use	1 : 1
Maximum gap fill	0.5 mm (0.02 in)
Pot life	15-20 minutes
Full cure	24 hours

**Typical Performance of Cured Adhesive**

Shear strength (zinc) ISO4587	5-6 MPa (700-900 psi)
180° Peel strength (rubber/leather)	3.2 N/25mm (substrate failure)
Tensile strength DIN53504	6-8 MPa (900-1200 psi)
Elongation at break DIN53504	25%
Hardness ISO868	50 Shore D
Glass Transition Temperature (Tg)	80°C (180°F)
Coefficient of thermal expansion (ASTM D-696)	85 x 10 <sup>-6</sup> 1/K

**Temperature Resistance**



“Hot strength” shear strength tests performed on mild steel. 24hr cure at room temperature and conditioned to pull temperature for 30 minutes before testing.

PT328 can withstand higher temperatures for brief periods providing the joint is not unduly stressed. The minimum temperature the cured adhesive can be exposed to is -40°C (-40°F) depending on the materials being bonded.

The information given and the recommendations made herein are based on our research and are believed to be accurate but no guarantee of their accuracy is made. In every case we urge and recommend that purchasers before using any product in full-scale production make their own tests to determine to their own satisfaction whether the product is of acceptable quality and is suitable for their particular purpose under their own operating conditions. THE PRODUCTS DISCLOSED HEREIN ARE SOLD WITHOUT ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED.

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## ***Additional Information***

This product is not recommended for use in contact with strong oxidizing materials. This product may affect some thermoplastics and users must check compatibility of the product with such substrates.

Information regarding the safe handling of this material may be obtained from the material safety data sheet (MSDS).

Users are reminded that all materials, whether innocuous or not, should be handled in accordance with the principles of good industrial hygiene.

## ***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.

## ***Directions for Use***

- 1) Surfaces must be clean, dry and grease-free prior to bonding.
- 2) Apply a thin bead of adhesive pre-mixed through a static mixer nozzle. (Alternatively bulk material can be dispensed via metered dispensing equipment).
- 3) Assemble components and clamp.
- 4) Maintain pressure until handling strength is achieved.
- 5) Allow 24 hours for adhesive to fully cure. Accelerated cure times may be achieved by heating.

## ***Storage & Handling***

Storage Temperature	15 to 25°C <i>(60 to 77°F)</i>
Shelf Life Stored in original unopened containers	6 months

A little separation over time of an oily phase is possible and considered characteristic of the packed product; it does not affect the final performance of the product.

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