

### Features & Benefits

- Designed to meet the requirements of UL94
- Full cure at room temperature
- Adhesion to a variety of substrates

### Description

PERMABOND® ET5272 is a two-part adhesive ideal for bonding a wide variety of substrates. When fully cured, ET5272 exhibits exceptional adhesion - even on hard-to-bond substrates. The controlled flow properties as well as its ease of mixing and application, enables the adhesive to be used where some gap filling properties are required.

The cured adhesive has been designed to meet the fire retardancy requirements of UL94 V-0.

### Physical Properties of Uncured Adhesive

	ET5272A	ET5272B
Chemical composition	Epoxy Resin	Polyamide Hardener
Appearance	Ivory	Dark Grey
Viscosity @ 25°C	20 rpm: 25,000-40,000 mPa.s (cP) 2 rpm: 90,000-110,000 mPa.s (cP)	20 rpm: 15,000-25,000 mPa.s (cP) 2 rpm: 20,000-35,000 mPa.s (cP)
Specific gravity	1.5	1.5

### Typical Curing Properties

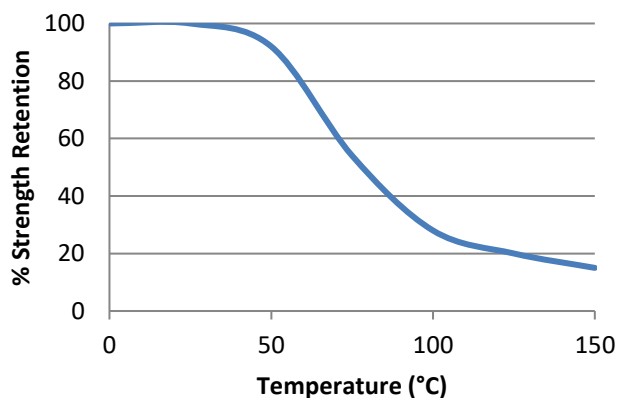
Mix ratio	1:1 by volume 1:1 by weight
Maximum gap fill	2 mm 0.08 in
Usable / pot life	@25°C: 2 hours
Working strength	@25°C: 12 hours @ 60°C: 1 hour
Full cure	@25°C: 72 hours @ 60°C: 2 hours

### Typical Performance of Cured Adhesive

Shear strength* (ISO4587)	Mild steel: >15 N/mm² (>2200 psi) Zinc: >15 N/mm² (>2200 psi)
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\*Strength results will vary depending on the level of surface preparation and gap.

### Temperature Resistance



ET5272 can withstand higher temperatures for brief periods (such as for paint baking and wave soldering processes) 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.

### Additional Information

This product is not recommended for use in contact with strong oxidizing materials.

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

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

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## Surface Preparation

Surfaces should be clean, dry and grease-free before applying the adhesive. Use a suitable solvent (such as acetone or isopropanol) for the degreasing of 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. Dual cartridges:
  - a) Insert the cartridge into the application gun and guide the plunger into the cartridge.
  - b) Remove the cartridge cap and dispense material until both sides are flowing.
  - c) Attach the static mixer to the end of the cartridge and begin dispensing the material.
2. Apply material to one of the substrates.
3. Join the parts. Parts must be joined within 2 hours of mixing the two epoxy components.
4. Large quantities and/or higher temperature will decrease the usable life or pot life.
5. Apply pressure to the assembly by clamping until handling strength is obtained.
6. Full cure will be obtained after 72 hours at 23°C. Heat can be used to accelerate the curing process.

## Storage & Handling

Storage Temperature	5 to 25°C (41 to 77°F)
Shelf Life Stored in original unopened containers	12 months

## Video Links

Surface preparation:

<https://youtu.be/8CMOMP7hXjU>



## Other Products Available

### Anaerobics

- Thread lockers
- Thread sealants
- Gasket makers
- Sealants / retainers

### Cyanoacrylates

- Instant adhesives
- For rapid bonding of metals, plastics, rubber and many other materials

### Epoxies

- Two-part room temperature cure adhesives
  - Single-part heat cure adhesives
- Modified Technology (MT) flexible grades available

### MS-Polymers

- Single-part, moisture-curing, flexible sealants

### Polyurethanes

- Two-part room temperature curing adhesives

### Toughened Acrylics

- Rapid curing, high strength structural adhesives

### UV Light Cured Adhesives

- Glass / plastic bonding
  - Optically clear
  - Non-yellowing

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