

Features & Benefits

- Adhesion to a wide variety of substrates
- Full cure at room temperature
- Easy to apply
- Suitable for potting filters
- Low viscosity, easy to spread
- Long pot-life

Description

PERMABOND® ET5310 is a low viscosity two-part adhesive with a controlled exothermic heat evolution and a long usable life. It is ideal for potting and casting applications.

Physical Properties of Uncured Adhesive

	ET5310A	ET5310B
Chemical composition	Epoxy Resin	Amine Hardener
Appearance	Red	Blue
Viscosity @ 25°C	2rpm: 4000 – 6000 mPa.s (cP)	2rpm: 30 - 100 mPa.s (cP)
Specific gravity	1.2	1.0

Typical Curing Properties

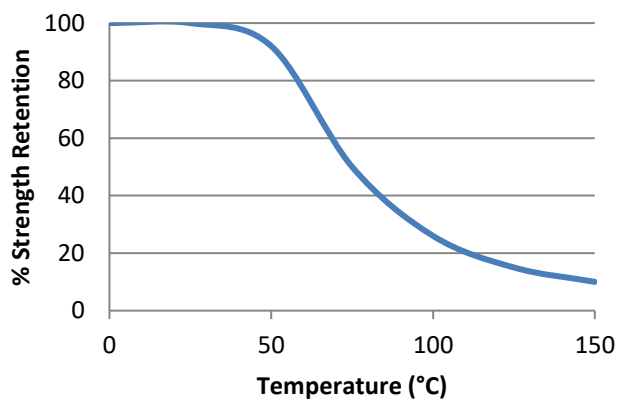
Mix ratio	100:29 by weight 3:1 by volume
Maximum gap fill	0.25 mm 0.01 in
Usable / pot life @23°C	2 hours
Time to working strength @23°C	8 hours
Full cure @23°C	24 hours

Typical Performance of Cured Adhesive

Shear strength (mild steel)* (ISO4587)	5-8 N/mm² (725-1200 psi)
Hardness (ISO868)	80-90 Shore D

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

Temperature Resistance



ET5310 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.

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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.

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.

Storage & Handling

Storage Temperature	5 to 25°C (41 to 77°F)
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Directions for Use

1. Accurately weigh 100 parts resin to 29 parts hardener. Mix thoroughly taking care not to entrap air.
2. Apply material. If potting; take care to fill component and not entrap air.
3. If bonding a joint or laminating, assemble 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 for 8 hours or until handling strength is obtained.
6. Full cure will be obtained after a **minimum of 24** hours at 25°C (77°F). Heat can be used to accelerate the curing process.

Video Links

Surface preparation:

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



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