

Technical data sheet



Product: ET5392

Manufacturer: PERMABOND ENGINEERING ADHESIVES

Product group: KLEBSTOFF

Article group: 2-K KLEBSTOFF

Download: 15.04.2026

PERMABOND® ET5392

This data sheet was provided to you by Tewipack Uhl GmbH. The company tewipack Uhl GmbH assumes no responsibility for the topicality and the Accuracy of the information contained. The properties of the products can vary due to various influences such as composition and condition of the Substrate, impurities in or on the substrate, temperature and humidity at the Change storage and environmental conditions during use. Using this product in combination with other material, the customer is responsible for to check through our own tests whether the product is suitable for the planned combination and whether this combination delivers the expected results

Tewipack Uhl GmbH
Industriestraße 15
D-75382 Althengstett

Telephone:
+49(0)7051/9297-0
Fax:
+49(0)7051/9297-99

E-Mail:
info@tewipack.de
Website:
www.tewipack.de

Managing director:
Alexander Uhl,
Michael Uhl
HRB 330424
Amtsgericht
Stuttgart

Bank details:
Sparkasse
Sindelfingen
Pforzheim
Calw
BLZ 666 500
85
Konto 17 787

Commerzbank
Sindelfingen
BLZ 603 400 71
Konto 8 001 166

Vereinigte
Volksbank AG
Böblingen
BLZ 603 900 00
Konto 80 089
003

Postbank
Stuttgart
BLZ 600 100
70
Konto 146
294 708

Features & Benefits

- 💧 Adhesion to a wide variety of substrates
- 💧 Full cure at room temperature
- 💧 Easy to apply
- 💧 Semi-toughened
- 💧 Good impact strength

Description

PERMABOND® ET5392 is a 1:1 mixable epoxy adhesive. It is semi-toughened and ideal for structural applications exposed impact and vibration stresses. It is ideal for bonding different materials where differential thermal expansion is anticipated. ET5392 can be used to bond a wide variety of materials including plastics, composites and metals – in particular, stainless steel.

Typical Performance of Cured Adhesive

Shear strength (mild steel)* (ISO4587)	Cured 72hrs @23°C: 22-24 N/mm ² (3200-3500 psi) Cured 2 hrs @ 60°C: 23-25 N/mm ² (3300-3600 psi)
Shear strength (stainless steel)* (ISO4587)	Cured 72 hrs @ 23°C As received: 23-26 N/mm ² (3300-3800 psi) Gritblast/degrease: 26-28 N/mm ² (3800-4000 psi) Cured 2 hrs @ 60°C As received: 23-26 N/mm ² (3300-3800 psi) Gritblast/degrease: 30-33 N/mm ² (4400-4800 psi)
Peel strength (aluminium) (ISO4578)	Cured 2hrs @ 60°C: 100-110 N/25mm (22-24 PIW)
Hardness (ISO868)	72-76 Shore D

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

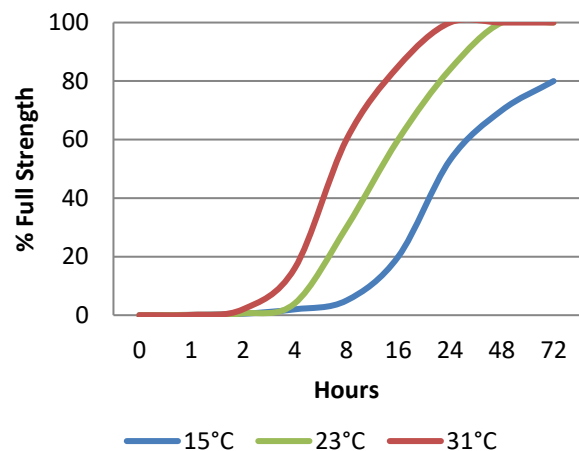
Physical Properties of Uncured Adhesive

	ET5392A	ET5392B
Chemical composition	Epoxy Resin	Polyamide
Appearance	White	Black
Viscosity @ 23°C	2rpm: 500,000-750,000 20rpm: 140,000-180,000 mPa.s (cP)	20rpm: 30,000-50,000 mPa.s (cP)
Specific gravity	1.1	1.3

Typical Curing Properties

Mix ratio	1:1 by volume 95:100 by weight
Maximum gap fill	4 mm 0.08 in
Usable / pot life @23°C 10g mixed	2 hours
Handling time @23°C	8-12 hours
Working strength @23°C	24 hours
Full cure	@23°C: 72 hours @60°C: 2 hours

Strength Development

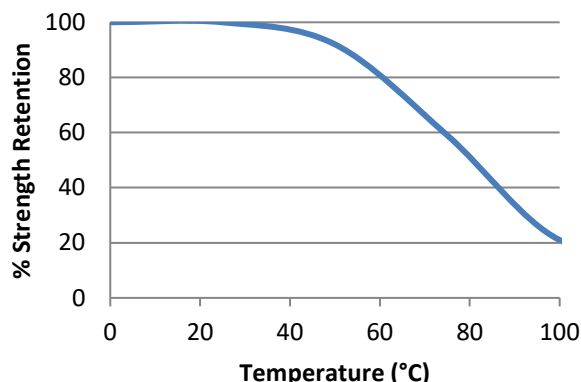


Graph shows typical strength development of bonded components. An increase of 8°C in temperature will halve the cure time. Lower temperatures will result in a slower cure time.

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.

No representative of ours has any authority to waive or change the foregoing provisions but, subject to such provisions, our engineers are available to assist purchasers in adapting our products to their needs and to the circumstances prevailing in their business. Nothing contained herein shall be construed to imply the non-existence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of this patent. We also expect purchasers to use our products in accordance with the guiding principles of the Chemical Manufacturers Association's Responsible Care® program.

Hot Strength



"Hot strength" shear strength tests performed on mild steel. Fully cured specimens conditioned to pull temperature for 30 minutes before testing at temperature.

ET5392 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 -55°C (-65°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 safety data sheet.

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

This Technical Datasheet (TDS) offers guideline information and does not constitute a specification.

Storage & Handling

Storage Temperature	5 to 25°C (41 to 77°F)
---------------------	------------------------

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 two 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 (77°F). Heat can be used to accelerate the curing process.

Video Links

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



Two-part epoxy directions for use:
<https://youtu.be/GRX1RyknYqc>



www.permabond.com

- UK: 0800 975 9800
- General Enquiries: +44 (0)1962 711661
- US: 732-868-1372
- Asia: + 86 21 5773 4913

info.europe@permabond.com

info.americas@permabond.com

info.asia@permabond.com

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.

No representative of ours has any authority to waive or change the foregoing provisions but, subject to such provisions, our engineers are available to assist purchasers in adapting our products to their needs and to the circumstances prevailing in their business. Nothing contained herein shall be construed to imply the non-existence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of this patent. We also expect purchasers to use our products in accordance with the guiding principles of the Chemical Manufacturers Association's Responsible Care® program.