Permapond HH167

Permabond HH167 is a high viscosity gap filling silver paste, which can be used for repairing metal machinery parts. It is ideal for repairing worn shafts, broken threads, damaged keyways and splines. Permabond HH167 has excellent chemical and temperature resistance.



HH167 is ideal for metal repair

- Single part room temperature curing
- Corrosion resistant
- Solvent free
- Silver in colour to match metal
- Very high strength

Summary: High Viscosity High Strength Metal Repair

PHYSICAL PROPERTIES

Colour Silver

Viscosity @25°C Thick Paste
Maximum Gap Fill 0.3 mm

Density 1.1

TYPICAL PROPERTIES

Handling Time 15-30 minutes

Working Strength 3-6 hours
Full Strength 24 hours
Shear Strength 25-35 MPa

Torque Strength (M10 nuts & Bolts) Breakaway: 35-45 Nm

Prevail: 10-20 Nm

Temperature Range -55 to +150°C

Cure times are typical for steel at 23°C (73°F). Copper and its alloys will be faster while oxidised or passivated surfaces like stainless steel will be slower. Temperature will also effect the cure - for every 8°C (15°F) rise in temperature, the stated cure time halves; for every 8°C (15°F) drop in temperature, the stated cure time doubles.



TEMPERATURE RESISTANCE

Thermal resistance is excellent between -55 and 150°C. Heating causes the adhesive to soften but strength is regained on cooling provided 150°C is not exceeded for prolonged periods.

HH167 is resistant to a variety of chemicals such as water, oils, fuels and refrigerants, although very aggressive environments such as strong acids, alkalis and very polar solvents should be avoided. HH167 should not be used in pure oxygen systems.

Storage and Handling

When stored in the original unopened containers at 5-25°C, the shelf life of this product is 12 months minimum from the date of despatch from Permabond.

Please also read the Material Safety Data Sheet. Users are reminded that all materials, whether innocuous or not, should be handled according to the principles of good industrial hygiene.

Directions for use:

- Surfaces should be clean, dry and grease free prior to bonding. Abrading and degreasing the surface will give a much stronger bond. (MEK or similar solvent can be used to degrease surfaces.)
- If bonding unreactive metals such as aluminium, titanium or zinc, we would recommend using Permabond A905 surface conditioner.
- ▶ Apply adhesive to the leading edge of both male and female components and assemble parts.
- ▶ Allow the adhesive to cure before exposing to chemicals / pressure etc. (See cure speed section.)

Other Products in the Permabond Range...

Cyanoacrylate adhesives...

General purpose Low bloom / Low odour High temperature resistance Metal bonding Flexible Toughened



We also have a new polyolefin primer for pretreating polypropylene, polyethylene, PTFE. For use with cyanoacrylate adhesive.



Anaerobic adhesives...

Threadlocking
Pipe-sealing
Retaining
High temperature resistance
Toughened
Variety of viscosities and strengths available

If you require help with an application, please contact the Permabond team for technical advice on surface preparation, joint design, adhesive selection and how to optimise your production process.

The information given and the recommendations made herein are based on our experience and are believed to be accurate. No guarantee as to, or responsibility for, their accuracy can be given or accepted, however, and no statement herein is to be treated as a representation or warranty. In every case we urge and recommend that purchasers, before using any product, make their own tests to determine, to their own satisfaction, its suitability for their particular purposes under their own operating conditions.

UK Customer Service: 0800 975 9700 UK Helpline: 0800 975 9800 Tel. +44(0)2380 611400 Germany: 0800 10 13 177 France: 0805 11 13 88 Fax. +44(0)2380 611700



Permabond Engineering Adhesives Ltd, Wessex House, Upper Market Street, Eastleigh, SO50 9FD **TH167**