Permabond®
Engineering Adhesives

ADHESIVES & SEALANTS FOR FILTERS



Permabond's line of adhesives and sealants offers the performance characteristics needed to bond and seal the many different substrates used in filter manufacturing.

Anaerobic adhesive sealants for rolled seams and crimp sealing.

Cyanoacrylate adhesives quickly form spliced gaskets and bond gaskets to end caps.

Single part epoxies are a cost effective alternative to welding metal filter components. The added benefit of a complete seal is a result of potting components.

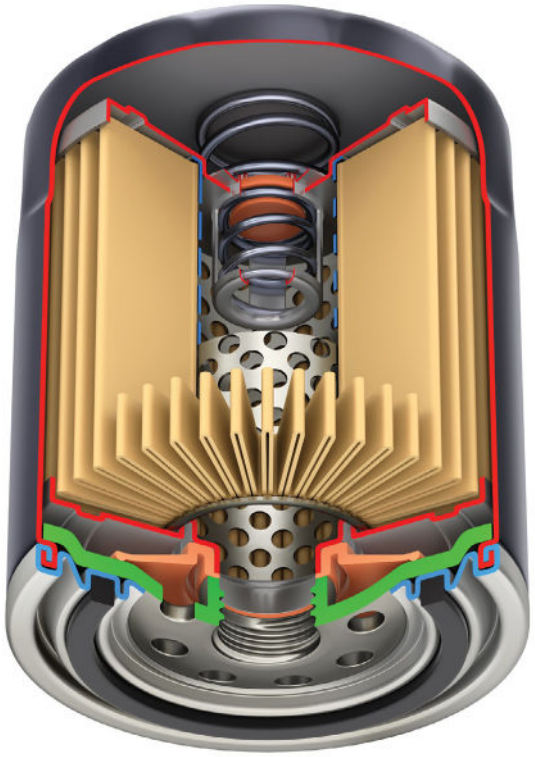
Two component epoxies which are low viscosity are ideal for potting pleated filter media and have excellent resistance to water, fuel, etc. The low exotherm temperature makes them suitable for bulk volume potting applications.

Polyurethanes for potting media.

Structural acrylics offer high speed, durable bonding.

TYPICAL APPLICATIONS:

- Crimping Seals
- Sealing Disc Shaped Filters
- Sealing Rolled Seams to the Base Plate
- Bonding Filter Assembly to the End Plate
- Bonding Rubber Gaskets to the Base Plate
- Potting Filter Media into the Base Plate



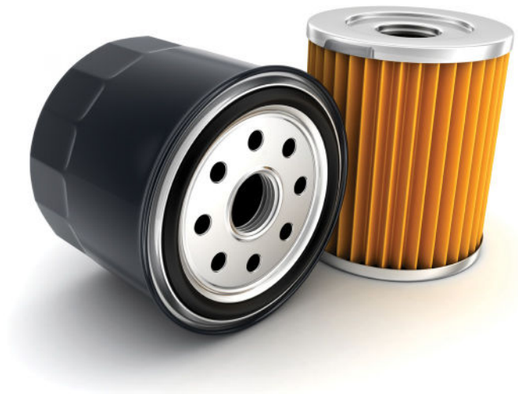
Some of these products are highlighted in the tables that follow. If you do not see the product you require, contact Permabond for a recommendation or custom formulation for your unique application.

Gasket Splicing and Bonding
CYANOACRYLATES

Product	Flexibility	Viscosity cP	Fixture Time	Temp. range (°C) °F
Permabond 105 Elastomer bonding for gasket bonding or forming rubber gaskets.	Low	40	<15 sec	(-55 to +82) *-65 to +180*
Permabond 731 Toughened cyanoacrylate for high durability.	Toughened	150	<30 sec	(-55 to +120) *-65 to +250*
Permabond 792 Surface insensitive very fast curing with higher temperature resistance.	Low	90	<3 sec	(-55 to +120) *-65 to +250*
Permabond 825 Patented High temperature resistance.	Low	125	<20 sec	(-55 to +200) *-65 to +390*
Permabond 910® The original methyl, metal bonding cyanoacrylate.	Low	80	<15 sec	(-55 to +90) *-65 to +195*
Permabond 2011 Rapid curing high viscosity gel cyanoacrylate.	Low	Gel	<10 sec	(-55 to +120) *-65 to +250*



Gaskets are created by bonding two spliced ends of rubber together with Permabond cyanoacrylates. These gaskets or preformed gaskets are bonded to the end caps of heavy duty truck air filters and industrial element return filters with Permabond cyanoacrylates.



Contact Permabond if you don't see exactly what you need!



Rolled Seam - Crimp Sealing
ANAEROBIC ADHESIVE SEALANTS

Product	Viscosity (mPa.s) cP	Gap fill in (mm)	Flexibility	Compressive strength	Temp. resistance °C (°F)
Permabond HH040 General purpose seam sealer, thixotropic sealant.	5000 thixotropic	0.010 (0.254)	Low	2000 psi	High 300°F (150°C)
Permabond HM166 High temperature resistant seam sealer.	15,000 thixotropic	0.020 (0.500)	Low	2300 psi	Very High 450°F (230°C)
Permabond MH196LV Maximum gap filling seam sealer.	Gel	0.020 (0.500)	High	750 psi	High 300°F (150°C)
Permabond LM198 Very flexible.	8000 some thixotropic properties	0.012 (0.305)	High	1400 psi	High 300°F (150°C)

Anaerobic adhesives cure when confined between metal surfaces such as a rolled seam. Products vary in temperature resistance, gap fill, and viscosity. Above are only a few popular grades listed. Contact Permabond if you don't see exactly what you need!

SEAM SEALING - CRIMP SEALING

The following list details why Permabond anaerobic sealants are the preferred choice for rolled seam and crimp sealing.

- Reduced reject rates
- Environmentally friendly
- Non-flammable - no hazardous shipping costs
- 100% solids - no waste
- Application process can be easily automated
- Fluoresce under black light for QC inspection
- Excellent resistance to water, oil, fuel, and other chemicals



Permabond®
Engineering Adhesives

ADHESIVES & SEALANTS FOR FILTERS

End Cap Bonding MEDIA POTTING

Product	Viscosity Description	Viscosity cP	Service Temp.	Cure
Permabond ES550 Non sag, toughened, high impact strength.	No Sag	1,500,000	-40°F to 355°F (-40°C to 180°C)	130°C (266°F) 75 min 150°C (300°F) 60 min 170°C (338°F) 40 min
Permabond ES562 Free flowing, toughened, high impact strength.	Free Flowing	22,500	-40°F to 355°F (-40°C to 180°C)	130°C (266°F) 60 min 150°C (300°F) 45 min 160°C (320°F) 20 min
Permabond MT382 Flexible modified epoxy, 200% elongation, Shore D 25.	Self Leveling	21,500	-40°F to 250°F (-40°C to 120°C)	2:1 Mix Ratio Handling Strength < 2 hours
Permabond PT328 Two component polyurethane.	Free Flowing	5250	-40°F to 250°F (-40°C to 120°C)	1:1 Mix Ratio Handling Strength < 2 hours
Permabond ET5147 Formulated in compliance with FDA 175.105.	Thixotropic paste	20rpm: 32,500 mPa.s (cP) 2rpm: 120,000 mPa.s (cP)"	-40°F to 250°F (-40°C to 120°C)	2:1 Mix Ratio Handling Strength < 5 hours

Permabond manufactures a full line of adhesives for filter manufacturing. Products with different viscosity, hardness, elongation, temperature resistance, and cure speeds are available. A few of our products and capabilities are listed here, please contact Permabond for more information!



PERMABOND.COM

Authorised distributor stamp:

info.americas@permabond.com US 732 868 1372
info.europe@permabond.com UK +44 (0)1962 711661
info.asia@permabond.com Asia +86 21 5773 4913

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. Always refer to current product technical datasheet for most recent and accurate technical information.