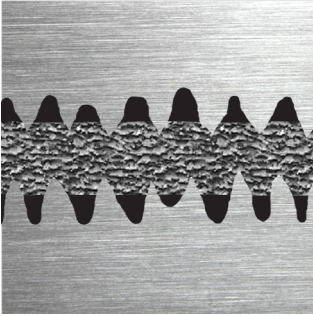
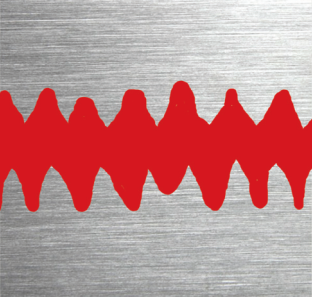


# Sales Tool Anaerobic Gasketmakers®

Permabond Anaerobic Gasketing adhesives are single part, room temperature curing sealants that polymerize in the presence of metal and absence of air.

Method	Advantages	Limitations
<b>Pre-cut Gaskets</b>  <i>Conventional gaskets leave air space in imperfections in the metal surface.</i>	<ul style="list-style-type: none"><li>• Tried and trusted - limitations known</li><li>• Can be used on non-metal substrates</li><li>• Can be used as a shim or gap</li><li>• Instant pressure seal</li></ul>	<ul style="list-style-type: none"><li>• Not as effective against leaks</li><li>• Require a different size (SKU) for each application</li><li>• May require retorquing</li><li>• Some gaskets are fragile and difficult to handle without damaging</li><li>• Degradation of pre-cut gaskets can allow loose particles to clog valves</li></ul>
<b>Permabond Gasketmakers®</b> <i>(form-in-place gaskets)</i>  <i>By completely filling the space Gasketmakers provide many advantages over conventional gaskets.</i>	<ul style="list-style-type: none"><li>• No relaxation or shrinkage - eliminates the need to retighten over time</li><li>• Eliminates leaks</li><li>• One adhesive will replace many pre-cut gasket shapes</li><li>• No need to handle fragile gaskets</li><li>• No disintegration - eliminates risk of leaks or blockages</li><li>• Vibration proof</li><li>• Remains flexible after cure - no long-term embrittlement</li><li>• Easy to dismantle with normal tools - very flexible grades available for soft metals - low adhesion strength</li><li>• Suitable for rough surfaces - reduces machining</li><li>• Non-shimming - provides thinnest gasket increasing blowout pressures</li><li>• 100% coverage for better stress distribution</li><li>• Prevent rust</li><li>• One component</li><li>• Easy to apply - dispenses easily through automatic dispensers for complex seals - Can be screen printed</li><li>• Easy to wipe off (in uncured state)</li><li>• Fast</li><li>• No odor</li></ul>	<ul style="list-style-type: none"><li>• Metal or ASC10 needed</li><li>• Not recommended for use with some plastic</li><li>• Parts need to be closely fitting - redesign may be needed to eliminate built in gaps for pre-cuts</li></ul>

## Permabond Identification System

Permabond anaerobic identification system consists of two letters followed by three numbers.

The letters indicate strength and viscosity, the numbers are unique for each product.

- H = High
- M = Medium
- L = Low

The first letter represents strength, the second represents viscosity.

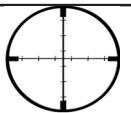
Example: LH197 = Low strength + High viscosity

## Industries to Target

Gaskets are used in most industries.

Following are only a few examples...

- |                        |                |
|------------------------|----------------|
| ■ Automobiles          | ■ Marine       |
| ■ Commercial           | ■ Military     |
| ■ Electronics          | ■ Pumps        |
| ■ Farm Equipment       | ■ Recreational |
| ■ Industrial Equipment | ■ Valves       |
| ■ Industrial Machinery | ■ Wind Energy  |



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**Permabond®**  
Engineering Adhesives

# Sales Tool Anaerobic Gasketmakers®

## Conditions affecting Cure Rate

- **Temperature** - Cure rate increases with temperature
- **Gap** - Cure rate decreases with increasing gap
- **Surface Finish** - See table to the right -
- **Substrates** - Cure rate increases with more active metals. See below

## Surface Finish -

Super Active	Active	Inactive	Passive	Surface Finish μ in	Cure After 45 mins
Very Fast Cure	Fast Cure	Slower Cure	Activator Required		
Brass	Steel	Anodized Aluminum	All Non-metal Surfaces	<b>325</b>	<b>15%</b>
Copper	Nickel	Cadmium Finishes	Painted metals	<b>200</b>	<b>90%</b>
Magnesium	Aluminium	Chrome Finishes	Laquered finishes	<b>100</b>	<b>50%</b>
		Passivated Metals		<b>22</b>	<b>30%</b>
		Stainless Steel			
		Titanium			
		Zinc			

For more information review the blog on <http://www.permabond.com/blog/> on the relationship between Air, Metal and Anaerobic Adhesives.

## Gasket length from one 50ml bottle

Bead Diameter	Length of Bead	Glue Line Thickness over 25mm (1") width
1.5mm (0.06") •	25 meters (82 feet)	0.075mm (0.003")
3mm (0.12") ●	6 meters (20 feet)	0.3mm (0.012")

Product	Description	Color	Viscosity, cP	Max. Gap Fill		Shear Strength, Steel		Fix- ture Time, Steel, mins	Temperature Range			
				in	mm	psi	N/mm²		Min.		Max.	
									°F	°C	°F	°C
HH190	Maximum gap fill, general purpose flange sealant.	Purple	600,000	0.025	0.635	900	6	15	-65	-54	250	120
	This very high viscosity sealant easily dispenses to form high strength gaskets/ seals on all kinds and sizes of equipment.											
LH197	Very flexible, easy to remove. Ideal for soft metals.	Green	37,000	0.012	0.305	750	5	20	-65	-54	300	150
	LH197 is low strength, and very flexible making it ideal for use on aluminium and other soft metals especially when removal for maintenance or repair is required.											
MH196	Fast cure, high temperature resistant.	Red	260,000	0.020	0.508	1,500	10	15	-65	-54	390	200
	The high temperature resistance allows use in engines and other components that generate heat.											
MH199	Very thixotropic, fast cure, high temperature resistant.	Red	185,000	0.020	0.508	1,100	8	20	-65	-54	390	200

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## Finding Manufacturers

The Thomas directory ([www.thomasnet.com](http://www.thomasnet.com)) is a popular source of information regarding manufacturers of specific products.

Alternatively, Permabond is more than happy to investigate specific target areas for you and can also advise of any branches of multinational Permabond users who may be in your area. Email [info.americas@permabond.com](mailto:info.americas@permabond.com) with your request.

Competitor	Permabond Advantage
ASI	Permabond quality, service and support are respected. ( <i>Low price doesn't matter if the customer is shut down due to a quality or delivery problem.</i> )
Cyberbond	
Delo	Permabond has a larger product range and better distributor margins.
Henkle Loctite	Permabond offers much higher margins to our distributors while allowing you to sell our quality products at a lower cost. We work with our distributor partners to prevent share shifting business, to help you grow. Every customer is important to us, even those who only buy a few bottles.
Hernon	Permabond technical ability in many industries provide the support customers require.
Holdtite	Permabond quality, staffing and brand image are exceptional.
Ritelok	Permabond brand image, quality and technical abilities are proven assets.
Threebond	Primarily encountered in Asia, Permabond can offer better pricing, support and custom formulation services.

[www.permabond.com](http://www.permabond.com)

- Americas - 732-868-1372
  - Asia + 86 21 5773 4913
  - Europe +44(0)1962 711661
- [info.americas@permabond.com](mailto:info.americas@permabond.com)  
[info.europe@permabond.com](mailto:info.europe@permabond.com)  
[info.asia@permabond.com](mailto:info.asia@permabond.com)

### Additional Resources

#### Application Profiles Available:

- LH197 Sump Gasket

email [info.americas@permabond.com](mailto:info.americas@permabond.com)

## "Our Science ... Your Success"

### Business Development

Permabond's business development team will support your efforts finding manufacturers in your area. Contact Permabond for assistance prospecting, sales tools and training information.

### Sales

Permabond's sales engineers are available to support you in selecting the best possible adhesive solution for your customer, further training and joint visits.

### Technical Support

The experienced team of Permabond chemists is on hand to support you with product information, testing, and custom formulations.



For scale, note the size of the mans hard hat. The very high viscosity of HH190 allows easy application to such a large surface.

↑Permabond HH190 is applied to the flange of the gear box.



↑Permabond MH196 seals engine castings for lawn equipment. Applied here with a paint roller.



↑Permabond MH196 seals equipment housings in aircraft.

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