Why Use Anaerobics?

- Liquid adhesives provide greater surface-to-surface contact than mechanical fasteners.
- Quick curing without air accelerates assembly rates.
- Resistant to oils, solvents, and other surface treatments.
- Available in permanent and removable formulations.
- Superior bond strength often exceeds that of substrate material.
- Wide temperature range from -65°F to 480°F.
- Gap fill thickness range from 0.003 inches to 0.025 inches.
- Seals, bonds, and locks with one product.

How Do Anaerobic Adhesives Work?

Permabond anaerobic adhesive formulations are designed to cure when air is absent and metal surfaces are present; including iron, steel, stainless, and zinc. The liquid adhesive fills imperfections in the metal surfaces and gaps between the mated parts. The adhesive then rapidly cures to an inert plastic-like adhesive/sealant creating a solid 100% mechanical surface-to-surface contact and physical lock.

Permabond has developed anaerobic adhesive products for use in retaining applications once reserved for mechanical joining methods such as keyways, interference fits, and shrink fits. Permabond high performance anaerobic retaining formulations provide:

- 100% surface-to-surface contact; improves bond and seal quality.
- Improved part-to-part torque resistance over mechanical joining.
- 5-times greater load carrying capacity than mechanical joining.
- Joining of dissimilar metals; broadens scope of applications.
- Inherent corrosion resistance; protects part assembly.
- Reduced machining tolerances in part design.

Permabond threadlocking sealants are a cost-effective and performance-improving alternative to lock washers, locking threads, and studs. Permabond high performance anaerobic threadlocking formulations provide:

- Fast cure speeds for quick pressure testing; final cure within minutes.
- Permanent and removable threadlocking; increases project versatility.
- 100% leak-free thread lock, even with mis-threaded fittings.
- Inherent corrosion resistance; maintains thread lock integrity.
- Wicking grade sealants penetrate tight fitting and porous parts.

Permabond pipe sealing products have been specially formulated for durability and resistance to harsh environments. Permabond pipe sealant products provide:

- Teflon® based formulations for ease of assembly.
- Inert finished cure resistant to acids, solvents, steam and glycol-based products.
- Multiple viscosities to seal fine and coarse threads.
- Fast cure speeds for quick pressure testing; final cure within minutes.
- Permanent and removeable; increases project versatility.
- 100% leak-free pipe sealing, even with mis-threaded pipe.
- Final cure strength exceeds that of most pipe material; instantly seals to 1000 psi.

Permabond high performance gasketing products are anaerobic formulations specifically developed to exceed the application speed and flange seal integrity of conventional gasketing material. Permabond anaerobic gasketing sealants provide:

- Fast cure speed and strong finished cure eliminates flange re-tightening.
- A full range of viscosities for various gap-filling requirements.
- Fast cure speeds for quick pressure testing; final cure within minutes.
- Wide range of temperature resistance appropriate for harsh environments.
- Permanent and dismantleable gasketing increases project versatility.
- Broad flex and vibration tolerance with no loss to seal integrity.
- Reduced need for mechanical fasteners; bonds to 100% of surface.

Non-Warranty: 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 discussed herein are sold without any warranty, expressed 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 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 recommendations to practice any invention covered by any patent without authority from the owner of the patent. Not responsible for typographical errors.

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