

## Anaerobic Threadlocker **Technical Information Sheet**

## **Major Features**

- \* Vibration resistant
- \* Provides corrosion protection
- \* Lubricates threads for easier assembly
- \* Excellent chemical resistance

Designed for the locking and sealing of metal parts, Permabond A130 is ideally suited for use on components that need to be dismantled for maintenance. Giving outstanding vibration resistance, it can be used to replace a wide range of mechanical locking devices. Its excellent chemical resistance makes it suitable for sealing small hydraulic and pneumatic fittings and can dramatically reduce the effects of corrosion.

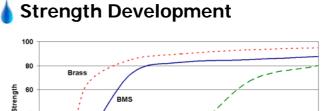
## **Physical Properties**

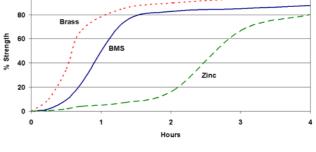
Chemical Type	Acrylic Single Part
Colour	Blue
Viscosity @ 25°C mPa.s	8,000 Slightly Thixotropic
Density	1.08
UV Fluorescent	Yes



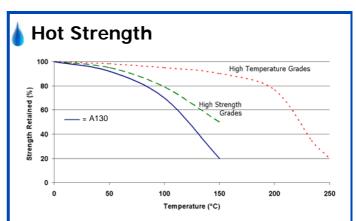
### **Performance**

Maximum Gap Fill Max. Thread Size		0.12 mm M20 <sup>3</sup> / <sub>4</sub> "
Handling strength	Steel	10-25 minutes
Working strength		1 hour
Full strength		24 hours
Torque strength (Break / Prevail)	M10 Steel ISO10964	16 / 7 Nm
Shear strength	Steel Collar and Pin	12 MPa
Service Temp.		-55 to +150°C



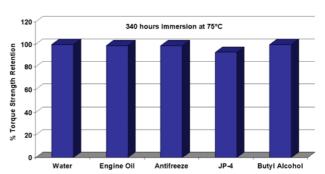


Cure times are typical at 23°C. Copper and its alloys will follow the faster cure while oxidised or passivated surfaces like stainless steel will tend towards the slower curve. Lower temperatures or large gaps will tend to extend the cure time. To reduce the cure time the use of Permabond A905, or heat, can be considered.



The reduction in strength shown here is reversed on cooling providing the joint is not overstressed. Exposure to higher temperatures may be acceptable for short periods

# **Chemical Resistance**



This product is not recommended for use in joints which will be in contact with either steam or pure oxygen. Avoid prolonged contact with strong acids, alkalis and very polar solvents



## **Surface Preparation**

Though the anaerobic adhesives will tolerate a slight degree of surface contamination best results are obtained on clean, dry and grease free surfaces. The use of Permabond Cleaner A is recommended.

In general roughened surfaces ( $\sim 25 \mu m$ ) give higher bond strengths than polished or ground surfaces.

To reduce the curing time, especially on inactive surfaces such as zinc, aluminium and stainless steel, the use of Permabond A905 can be considered.



## **Adhesive Application**



### Gasketing

Apply as a bead, by roller, silkscreen or stencil. Ensure all potential leak paths such as flange bolt holes are encircled.

Removal: use normal tools to to prise the surfaces apart. Ensure old adhesive is removed before reassembling the parts.

### Retaining

Apply a circumfrential bead; preferentially to the female component. Assemble with a twisting action.



For larger components use thixotropic products to prevent run off. Take care to ensure adhesive does not enter ball races or other mechanisms.



### **Thread Locking**

Apply sufficient adhesive to the bolt to ensure adequate coverage. For coarse threads use thixotropic grades.

For blind holes adhesive should be applied to the lower end of the female thread to ensure it is not forced out of the joint during assembly.

### **Thread Sealing**

Apply a continuous bead circumfrentially 1-2 threads from the leading edge. Ensure sufficient is applied to give a complete seal.



For taper/parallel threads ensure adhesive is positioned where the threads will engage fully. Gaps, and therefore cure times, may be greater than expected with this joint configuration.

Tighten with normal tools.

## Storage and Handling

### **Storage Temperature**

5 to 25°C

Users are reminded that all materials, whether innocuous or not, should be handled in according to the principles of good industrial hygiene. Full information can be obtained from the Material Safety Data Sheet.

### Other products in the Permabond range....

### **Anaerobics**

- ✓ Toughened
- ✓ Gas & Water approved
- ✓ High temperature resistance

### Cyanoacrylates

- ✓ Low bloom / low odour
- ✓ Flexible,
- ✓ High temperature resistance

### **Epoxies**

- ✓ Fast cure
- ✓ Toughened
- √ Flexible grades

### **Toughened Acrylics**

- Rapid cure
- ✓ Low odour

### **UV Light Cured**

- ✓ Glass / plastic bonding
- ✓ Optically clear
- ✓ Non yellowing

### Contact Permabond:

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