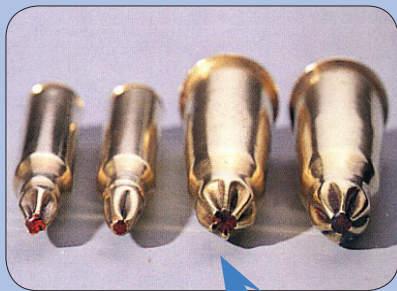


Munitions Adhesives

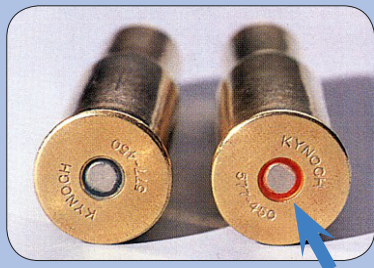
Application: Crimp sealing



Permabond dual cure anaerobic UV adhesives for blank ammunition sealing

- Sealant can be produced in a variety of colours for identification
- Viscosity can be matched to crimp design
- Friable polymer for rapid disintegration when fired
- Rapid curing - ideal for high-speed production lines

Application: Primer sealing



Permabond dual cure anaerobic UV adhesives for primer sealing

- Different colours can be produced for identification purposes
- Low viscosity for easy post-assembly application
- Compatible with lead-free primers
- Rapid curing - ideal for a high-speed production line

Permabond is a world leader in adhesive and sealant technologies, and a registered Nato Contractor. Permabond offers a range of products for the munitions manufacturing industry. We have a wealth of experience in providing custom formulations to suit specific munitions customer requirements.

Application: Bullet sealing



Permabond low viscosity anaerobic adhesive is patented technology for bullet sealing, offering a wealth of benefits over traditional methods of sealing (such as laquer and bitumen-based compounds).

Benefits of Permabond anaerobic sealants:

- Better joint coverage for improving sealing consistency
- Low viscosity for easy application after the bullet has been inserted
- UV fluorescent for inspection identification
- Reduced trajectory deflection

Adhesive used: Permabond anaerobic A1024.

Also available for the same application but offering additional UV cure is Permabond A1062

Benefits of Permabond dual cure anaerobic-UV sealants:

- Instant seal
- Easy to dispense
- Low viscosity for penetration between bullet and casing
- Cures anaerobically between bullet and casing
- Meniscus or 'fillet' can be cured with UV light - this gives additional durability and extra protection against moisture
- Fluoresces under UV black light for inspection purposes

Benefits over other methods of bullet sealing

Benefits over lacquer...

- Solvent free - no emissions or waste, non-flammable, 100% reactive
 - Single component - no mixing or pot-life
 - Controlled viscosity which can be matched to application
 - No creep, shrinkage or cracking
 - Excellent protection against moisture ingress
- Benefits over bitumen-based sealants**

- No heat-cure required
- No drying out or cracking
- Low viscosity for easy in-line dispensing
- Rapid cure
- Built in UV fluorescence enables easy inspection



Product selector

Features	Typical Applications	Cure method	Viscosity (mPa.s) cP	Handling time (copper)	UV fluorescence
Permabond A1024 Low viscosity wicking anaerobic sealant	Sealing between bullet and casing	Anaerobic cure	20 mPa.s	<5 minutes	Yes
Permabond A1062 Dual cure bullet sealant. Secondary UV cure allows the curing of the excess meniscus around the top of the casing providing improved durability and a visible seal.	Sealing between bullet and casing	Anaerobic / UV cure	20 mPa.s	<5 minutes	Yes
Permabond UV7148 Dual cure crimp sealant for blank ammunition. Excellent flow control.	Sealing the crimps on blank ammunition	Anaerobic / UV cure	Thixotropic 4000 - 5000 mPa.s	30 mins (anaerobic cure) <10 seconds UV cure	Yes

If you can't see the exact product you are looking for, or need more in depth technical information, Permabond's technical team would be more than happy to help. Permabond offers free custom development of sealants to suit your precise munitions project requirements. Please contact us to discuss.

Contact Permabond

www.permabond.com

US Helpline - 800-640-7599

• **UK - 0800 975 9800**

• **Asia + 86 21 5773 4913**

• **General Enquiries +44(0)1962 711661**

• **Deutschland 0800 101 3177**

• **France 0805 111 388**

info.europe@permabond.com

info.americas@permabond.com

info.asia@permabond.com



Permabond's sales engineers are available to assess your production line and find the best possible turnkey adhesive solution that will result in production efficiencies.

The experienced team of Permabond chemists is on hand to help you with custom formulations and fulfilling your technical data requests.



Permabond Worldwide

Wherever your manufacturing or R&D site may be located, Permabond representatives can be called upon to assist you. We have an extensive network of trained distributors worldwide.



Permabond
Engineering Adhesives

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.

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