

MUNITIONS ADHESIVES & SEALANTS

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.

A global team of technical, sales, and distribution professionals are specially trained to ensure they can assist you in selecting the most appropriate standard or custom formulated product for your unique application. Our team looks forward to hearing from you.



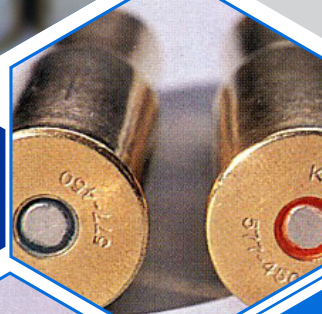
KEY FEATURES & BENEFITS

Anaerobic Adhesives and Sealants:

- ▶ Better joint coverage for improved sealing consistency
- ▶ Low viscosity for easy application after the bullet is inserted
- ▶ UV fluorescent for inspection identification
- ▶ Reduced trajectory deflection

Dual Cure Anaerobic-UV sealants

- ▶ Less skill involved - no need for a trained welder
- ▶ Reduced workplace hazards - no oxy-acetylene needed
- ▶ No pin prick weld holes; improved sealing
- ▶ More choice in terms of using dissimilar materials
- ▶ Adhesives available with metallic color to give a good aesthetic appearance



Munitions Adhesives

The table below lists Permabond adhesives and sealants that are commonly used for the listed application. Depending on your application requirements a different Permabond solution may be more suitable to your needs. Please contact Permabond. Permabond's technical team would be more than happy to help with your adhesive selection.

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	10-20	<20 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	10-20	<20 minutes	Yes
Permabond UV7141 Dual cure crimp sealant for blank ammunition. Excellent flow control.	Sealing the crimps on blank ammunition	Anaerobic / UV cure	1000 - 1700	<60 mins (anaerobic cure) <20 seconds (UV cure)	Yes

Benefits of Permabond over lacquer

- ▶ Solvent free – no emissions or waste, non-flammable, 100% reactive
- ▶ Single component – no mixing or pot-life
- ▶ Viscosity can be matched to application
- ▶ No creep, shrinkage, or cracking
- ▶ Excellent protection against moisture ingress

Benefits of Permabond 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

PERMABOND.COM

Authorized 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

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