



# Technical Data Sheet

## B648 High Temperature Retainer

### PRODUCT DESCRIPTION

B648 High Temperature Retainer is a low viscosity compound designed for bonding cylindrical fitting parts where high-temperature resistance is required. Tolerates minor surface contaminations from various oils and protection fluids. Typical applications include fixing gears/sprockets onto gearbox shafts and rotors on electric motor shafts.

### RETAINING COMPOUNDS

Bondloc Retaining Compounds have an anaerobic cure system, meaning it cures in the absence of air and the presence of metal ions. The resin remains liquid until it is confined between metal parts. Using Bondloc Retainers when mounting cylindrical parts has distinct advantages over mechanical assemblies. Using retaining compounds allows a manufacturer to use slip-fitted parts with relaxed machining tolerances.

### ANAEROBIC KEY FEATURES

- Increase assembly reliability
- Eliminate backlash in keys and splines
- Increase the strength of heavy press fits
- Eliminate fretting corrosion
- Seal against environmental corrosion
- Eliminate high assembly stresses
- Reduce variations in load transmission.

### TEST PERFORMANCE

Full Cure Time	2-6 hours @ 22°C
Pin & Collar – ISO 10123	>25N/mm <sup>2</sup>

### TEST CRITERIA

The test performance data reported was measured according to ISO 10123 using steel pins and collars and cured for 24 hours at 22°C (71.6°F) before testing.

### TECHNICAL FEATURES

Base technology	Urethane methacrylate
Colour	Green (UV Positive)
Cure	Anaerobic
Cure speed without Activator	10-15 mins @ 22°C
Cure speed with Activator	<5 mins @ 22°C
Viscosity Brookfield Sp2@20rpm@25°C	400-600 cps
Gap fill	0.15mm
Shelf Life	24 months @ 22°C
Specific Gravity ASTM D1475-13 (2020)	1.06
Temperature Range	-55°C to +180°C

### INSTRUCTIONS FOR USE

- Clean surfaces to be bonded with B7063 Solvent Cleaner and allow to dry
- Apply adhesive to the threads, apply sufficient adhesive to fill the voids and then assemble and tighten as required
- When the cure speed is slow use B7649 Anaerobic activator for increased cure and set times.

### LIMITATIONS

- This product is not recommended for use in pure oxygen and/or oxygen-rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials. Material removed from containers may be contaminated during use. Do not return product to the original container. Bondloc UK Ltd will not assume responsibility for product that has been contaminated or stored

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under conditions other than those previously indicated. If additional information is required, please contact our office, and report the problem

- Anaerobic products are not normally recommended for use on plastics (particularly thermoplastic materials where stress cracking of the plastic could result). Users are recommended to confirm compatibility of the product with such substrates.

### STORAGE

Store product in the unopened container in a dry area out of direct sunlight. Storage below 7°C or greater than 28°C can adversely affect product performance. If stored properly, this product has a shelf life of 24 months.

### HEALTH & SAFETY

This technical information sheet does not constitute a Safety Data Sheet (SDS). Before using this product ensure you have read and fully understood this products SDS.

### PACKAGING FORMAT

Bottles.....10ml, 25ml, 50ml, 250ml

### PRODUCT DISCLAIMER

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