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# SONLOK<sup>TM</sup> 3638 Retaining Compound

SONLOK 3638 is a fast curing; high strength anaerobic retaining compound for cylindrical fitting parts particularly where bond gaps can approach 0.25mm (0.01").

SONLOK 3638 retaining compound is a single component anaerobic adhesive, which develops high strength rapidly when confined in the absence of air between close fitting metal surfaces.

### **Applications:**

- Ideal to fill gaps up to 0.25 mm (0.01") diameter clearance.
- Maximum strength at room temperature.
- Used for locking bushings and sleeves into housings and on shafts.
- Excellent retaining, sealing and thread locking compound.

## **Adhesive Properties:**

Composition: Urethane Methacrylate

Color: Green

Viscosity: 2,500 cps at 25 °C

Brookfield RVT

Spindle 4 @ 20 rpm

Specific Gravity: 1.09

Maximum Diameter

of Thread/Gap Filling: 0.25 mm Flash Point: > 93  $^{\circ}$ C Solvent Content: None Shelf Life: 1 year

**Curing Properties:** 

Handling Cure Time: 5 minutes Functional Cure Time: 1-3 hours Full Cure Time: 24 hours

Compressive Shear Strength:

(ISO 10123)

After 24 hours at 22 °C

Steel Pins & Collars > 25 N/mm<sup>2</sup> > 4.300 psi

After 30 minutes at 22 °C

Steel Pins & Collars 15 - 17 N/mm<sup>2</sup>

2,250 psi

Temperature Range -55 to 150 °C



### **Physical Properties:**

Coefficient of Thermal Expansion, 80×10<sup>-6</sup>
ASTM D 696, K-1
Coefficient of Thermal Conductivity, 0.10
ASTM C 177,W/(m·K)
Specific Heat, kJ/(kg·K) 0.30

### **Chemical Resistance:**

Chemical	Temp.	% Initial Strength Retained	
	-	500 hours	1000 hours
Acetone	22 °C	100	100
Ethanol	22 °C	100	100
Motor Oil	125 °C	100	100
Gasoline	22 °C	100	100
Brake Fluid	22 °C	100	100
Water/Glycol	87 <sup>0</sup> C	100	95

### **Directions for use:**

#### For Assembly

- For best results, clean all surfaces (external and internal) with a cleaning solvent and allow solvent to evaporate.
- If the material is an inactive metal or the cure speed is to0 slow, spray with Activator 3071 or 3049 and allow to dry.
- For Slip Fitted Assemblies, apply adhesive around the leading edge of the pin and the inside of the collar and use a rotating motion during assembly to ensure good coverage.
- For Press Fitted Assemblies, apply adhesive thoroughly to both bond surfaces and assemble at high press on rates.
- For Shrink Fitted Assemblies the adhesive should be coated onto the pin, the collar should then be heated to create sufficient clearance for free assembly.
- Parts should not be disturbed until sufficient handling strength is achieved.

## For Disassembly

 Apply localized heat to the assembly to approximately 250°C. Disassemble while hot.

# Storage:

Anaerobic adhesives shall be ideally stored in a cool, dry place in unopened containers at a room temperature between 46  $^{0}$ F to 82  $^{0}$ F. Please do not return any unused material to its original container.

PRECAUTIONS: This product and the auxiliary materials normally combined with it are capable of producing adverse health effects ranging from minor skin irritation to serious systemic effects. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Material Safety Data Sheets (MSDS) for this and all other products being used are understood by all persons who will work with the material.

Warranty: All products purchased from or supplied by Parson are subject to terms and conditions set out in the contract. Parson warrants only that its product will meet those specifications designated as such herein or in other publications. All other information supplied by Parson is consider accurate but are furnished upon the express condition the customer shall make its own assessment to determine the product's suitability for a particular purpose. Parson makes no other warranty, either express or implied, including those regarding such other information, the data upon which the same is based, or the results to be obtained from the use thereof; that any product shall be merchantable or fit for any particular purpose; or that the use of such other information or product will nor infringe any patent.