

# **Technical Data Sheet**

# **Product Description:**

301282 is a fast curing, high strength anaerobic retaining compound for cylindrical fitting parts particularly where bond gaps can approach 0.25mm (0.01").

301282 High Strength Retainer 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: Color: Viscosity: Brookfield RVT Spindle 4 @ 20 rpm Specific Gravity: Maximum Diameter of Thread/Gap Filling: Flash Point: Solvent Content:	Urethane Methacrylate Green 2,500 cps at 25 $^{\circ}$ C 1.09 0.25 mm > 93 $^{\circ}$ C None
Shelf Life:	1 year
Curing Properties: Handling Cure Time:	5 minutes
Functional Cure Time: Full Cure Time: Compressive Shear Strength: (ISO 10123)	1-3 hours 24 hours
After 24 hours at 22 <sup>0</sup> C Steel Pins & Collars	> 25 N/mm <sup>2</sup> > 4,300 psi
After 30 minutes at 22 <sup>o</sup> C Steel Pins & Collars	15 - 17 N/mm <sup>2</sup> 2,250 psi
Temperature Range	-55 to 150 <sup>0</sup> 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 <sup>0</sup> C	100	100
Ethanol	22 <sup>0</sup> C	100	100
Motor Oil	125 <sup>0</sup> C	100	100
Gasoline	22 <sup>0</sup> C	100	100
Brake Fluid	22 <sup>0</sup> 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 a suitable Activator 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 5°C and 30°C.

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