



## ChemTools 8609 Retaining Compound

**ChemTools 8609** is a fast curing, medium strength anaerobic retaining compound for continuous working temperatures up to 150° C.

**ChemTools 8609** retaining compound is ideal for gap distances up to 0.127mm diameter.

Meets US Military Specification R-46082B Type I.

### Applications:

- Join rotor to shafts in fractional and sub-fractional horsepower motors.
- High temperature resistance retaining compound.
- Used for close fitting parts, rotor on shafts, bushes, pulleys and gears.
- Excellent retaining, sealing and thread locking compound.

### Adhesive Properties:

Composition:	Methacrylate Ester
Color:	Green
Viscosity:	125 cps at 25°C
Brookfield RVT Spindle 4 @ 20 rpm	
Specific Gravity:	1.10
Flash Point:	>100°C
Solvent Content:	None
Shelf Life:	1 year

### Curing Properties:

Handling Cure Time:	10 minutes
Functional Cure Time:	1 - 3 hours
Full Cure Time:	24 hours
Compressive Shear Strength: (ISO 10123)	
<b>After 24 hours at 22°C</b>	
Steel Pins & Collars	17 - 19 N/mm <sup>2</sup> 3,125 psi
<b>After 30 minutes at 22°C</b>	
Steel Pins & Collars	13 - 15 N/mm <sup>2</sup> 1,960 psi
Temperature Range:	-55 to 150°C



### Physical Properties:

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

### Chemical Resistance:

Chemical	Temp.	% Initial Strength Retained	
		500 hours	1000 hours
Acetone	22°C	100	90
Ethanol	22°C	100	100
Motor Oil	125°C	100	100
Petrol	22°C	100	100
Brake Fluid	22°C	100	100
Water/Glycol	87°C	90	80

### 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 too slow, spray with Activator 8071 or 8049 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 localised 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 7°C to 28°C. 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.

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