



## **ChemTools 8518** **Anaerobic Gasket Sealant**

**ChemTools 8518** is an anaerobic gasket sealant, which develops medium strength in a short time. The compound cures in the absence of air between close fitting metal surfaces.

**ChemTools 8518** is a flexible gasketing sealant which will flex with minor flange movements. Provides resistance to low pressure immediately after assembly of flanges

### **Applications:**

- Typically used as a form-in-place on rigid flanged connections, eg gearbox and engine castings, etc.
- Thixotropic nature reduces the migration of liquid product after application.

### **Adhesive Properties:**

Composition:	Dimethacrylate ester
Color:	Red
Viscosity: Brookfield RVT Spindle 7 @ 20 rpm	800,000 – 3,750,000 cps at 25°C
Specific Gravity:	1.13
Maximum Diameter of Thread/Gap Fill	>0.50mm
Flash Point:	93°C
Solvent Content:	None

### **Curing Properties:**

<b>Handling Cure Time:</b>	
Unprimed Surfaces	4 - 24 hours
Primed Surfaces	30 mins to 4 hours.
Compressive Shear Strength: (ISO 10123) <b>After 24 hrs at 22°C</b>	
Steel Pins & Collars	>5 N/mm <sup>2</sup> >725 psi
Lap Shear Strength, ISO 4587 Steel (grit blasted)	7.5 N/mm <sup>2</sup> 1,100 psi
Lap Shear Strength, ISO 6922 Steel (grit blasted)	8.5 N/mm <sup>2</sup> 1,200 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	Temperature	% Initial Strength Retained	
		500 hours	1000 hours
Acetone	22°C	100	95
Ethanol	22°C	90	85
Motor Oil	125°C	160	140
Petrol	22°C	60	55
Brake Fluid	22°C	95	95
Water/Glycol	87°C	100	90

### **Directions for Use:**

- 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.
- Apply manually as a continuous bead or by screen-printing to one of surface of the flanges.
- Low pressure can be used when testing to confirm a complete seal immediately after assembly.
- Flanges should be tightened as soon as possible after assembly to avoid shimming.

### **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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