



ENGLISH

Datasheet

Stock No: 918-6901

RS Pro Threadlocking Adhesive, 50ml

Description:

A single component, very low viscosity anaerobic thread locking compound with wicking capabilities. It cures when confined in the absence of air between close-fitting metal surfaces.

TYPICAL APPLICATIONS

- Formulated to be a very low viscosity anaerobic thread locking compound, which means it can be used as a post-assembly adhesive to wick into preassembled parts
- Its very low viscosity, means product can be used for some interference fit retaining applications
- Used as a porosity sealant for cast components

PROPERTIES OF MATERIAL

		Value
Chemical type		Dimethacrylate
Appearance		Light Green
Specific Gravity		~1.07
Viscosity(1) cPs		(Range) 7-12 (Typical Value) 10
Breakaway Torque(2)	N/m	Range 7-21 Typical 16
Prevail Torque(2)	N/m	Range 25 - 44 Typical 34
Initial Fixture Time(3)		(mins) 15
Full Cure		(Hrs) 24
Flash Point		(°C) > 100
Max Gap Fill		(mm) 0.15
Shelf Life @ 21°C		(Months) 12
Temp Range °C		Continuous -50 to +150

(1) Brookfield LVF spindle 2, 2.5rpm

(2) On M10 black oxide steel bolt and M10 bright steel nut, ISO 10964

(3) ISO 10964



CURING PERFORMANCE

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Typical curing speed(3) as % of final strength

15 mins	Finger Tight
1 hour	~40% strength
24 hours	100% strength

TYPICAL ENVIRONMENTAL RESISTANCE

Hot strength

Product is suitable for use at temperatures up to 150°C. At 130°C the bond strength will be ~70% of the strength at 21°C

Heat ageing

Product retains ~ 60% full strength when heated to 100°C for 90 days then cooled and tested at 21°C.

CHEMICAL / SOLVENT RESISTANCE

Anaerobics exhibits excellent chemical resistance to most oils and solvents including motor oil, leaded petrol, brake fluid, acetone, ethanol, propanol and water. Anaerobic adhesives and sealants are not recommended for use in pure oxygen or chlorine lines.

CURE SPEED VS. TEMPERATURE

All figures relating to cure speed are tested at 21°C. Lower temperatures will result in slower cure. Heating the assembled parts accelerates the curing process. Activator should be used when the temperature is less than 5°C.

CURE SPEED VS. SUBSTRATE

Cure speed and strength vary according to the substrates. When used on mild steel and brass components anaerobic adhesives will reach full strength more rapidly than more inert materials such as stainless steel and zinc dichromate. Activator may be used to accelerate cure speed.

Anaerobic adhesives only cure in the absence of air and with metal part activation.



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CURE SPEED VS. ACTIVATOR

Where speed of cure is too slow or the bond gap is very large, Anaerobic Activator may be used to accelerate cure speed. The use of an accelerator may reduce bond strength by up to 30%. RS Pro recommends testing on the parts to measure the effect.

CURE SPEED VS. BOND GAP

The size of the bond gap greatly affects the speed of cure of anaerobic adhesives. The larger the gap between surfaces, the slower the cure speed. Maximum recommended gap for this product is 0.15mm, which will give approximately the cure schedule as detailed in the properties table.

DIRECTIONS FOR USE

This is suitable for most standard diameter, medium to coarse-threaded screws, nuts and bolts. Ensure parts are clean, dry and free from oil and grease. Apply adhesive to all the engaged area. Assemble parts and allow to cure. Wipe excess adhesive from outside of joint. Product is normally hand applied from the bottle or tube. Dispensing systems are available for high volume assembly applications.

LIMITATIONS

Product is not recommended on certain plastics as stress cracking can sometimes result. Some anti corrosion chemicals inhibit the cure system in this type of anaerobic. Trials are recommended to establish whether cleaning of the parts is necessary. Activator may be required on plated parts.

GENERAL INFORMATION DATA RANGES

For safe handling of this product consult the Material Safety Data Sheet. **Important:** Product packed in bulk ($\geq 5\text{kg}$) has a shelf life of 6 months. The material must be filled into smaller bottles/tubes within this time period.

STORAGE

Optimal storage conditions are between 8°C and 21°C. Storage outside this temperature range can adversely affect product properties and may affect the stated shelf life.