

PRODUCT DESCRIPTION

Fasto A777 is a single component, low medium strength, anaerobic pipe sealant. A777 is a very high viscosity, thixotropic pipe sealing paste possessing high lubricity. Fasto A777 is formulated to lock and seal medium to coarse straight and tapered pipe threads on pipes Ø15mm to Ø80mm. A777 prevents vibration loosening and leakage through pipes threads. A777 will not cure outside the joint and is virtually non-fouling in most types of pipe systems. A777 cures when confined in the absence of air between close - fitting metal surfaces.

TYPICAL APPLICATIONS

Fasto A777 gives low strength break and prevail torque on assembled joints, thus enabling easier disassembly and servicing, which is further helped by the lubricity of A777. Fasto A777 will give an almost instant low pressure seal (up to 2 bar after 20mins.) and when fully cured will seal up to the bursting pressure of the pipe (e.g. 10,000 psi). Fasto A777 is suitable for most straight and tapered pipe threads of medium to coarse pitch, from Ø15mm to Ø80mm pipe.

PROPERTIES OF UNCURED MATERIAL

	Value
Chemical type	Dimethacrylate
Appearance	Fluorescent yellow
Specific Gravity	1.12
Viscosity cPs ¹	48,000
Viscosity cPs ²	15,000
Breakaway Torque ³ Nm	16
Prevail Torque ³ Nm	4.5
Fixture Time (min.) ⁴	15
Full cure (hours)	24
Max Gap Fill (mm)	0.25
Operating Temperature Range (°C)	-50 to +150 (continuous)

1 Brookfield RVT – Spindle 5, 2.5rpm

2 Brookfield RVT – Spindle 5, 20rpm

3 On M10 black oxide steel bolt and M10 bright steel nut, ISO10964

4 ISO 10964

TYPICAL CURING PERFORMANCE

Typical Speed:

15 mins	~10% strength
1 hours	~40% strength
24 hours	100% strength

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 part accelerates the curing process.

Activator Fasto AP49 should be used when the temperature is less than 5°C.

Cure speed vs. bond gap

The size of the bond gap greatly affects the speed of cure of anaerobic adhesives. Bond gap varies with thread type and size of the fastener. The larger the gap between surfaces, the slower the cure speed. Maximum recommended gap for Fasto A777 is 0.25mm.

Cure speed vs. Substrate

Cure speed and strength vary according to the substrates. When used on mild steel components, Fasto A777 will reach full strength more rapidly than on more inert materials such as stainless steel and aluminium.

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

Fasto AP49 activator may be used to accelerate cure speed.

Cure speed vs. activator

Where speed of cure is too slow or the bond gap is very large, Fasto AP49 Anaerobic Activator may be used to accelerate cure speed. The use of an accelerator may reduce bond strength by up to 30%.

Fasto recommends testing on the parts to measure the effect.

TYPICAL ENVIRONMENTAL RESISTANCE

Hot strength

Fasto A777 is suitable for use at temperatures up to 150°C. At 130°C the bond strength will be ~20% of the strength of at 21°C.

Heat ageing

Fasto A777 retains over ~85% full strength when heated to 100°C for 90 days then cooled and tested at 21°C.

Chemical / Solvent Resistance

Fasto A777 exhibit 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 and chlorine lines.

DIRECTIONS FOR USE

Ensure parts are clean and dry and free from grease or oil. Apply adhesive to all the engaged threads, although to minimise excess adhesives inside the joint, apply adhesive only to the male part, leaving first two threads clear. Assemble parts and allow curing. Wipe excess adhesive from outside of joint. Product is normally hand applied from the bottle.

Dispensing systems are available for high volume assembly applications. Please contact your Fasto representative for further advice on dispensing solutions.

GENERAL INFORMATION

For safe handling of this product consult the Material Safety Data Sheet.

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.

Packaging

Tubes: 50 ml & 250 ml

Available in bulk for use with dispensing systems.

Please Note: When packed an air space above product is vital to maintain stability.

LIMITATIONS

Fasto A777 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.

Fasto AP49 Activator may be required on planted parts.

DATA RANGES

The data contained in this data sheet may be reported as typical value and/or range. Values are based on actual test data and are verified on a regular basis.

NOTES

The information contained herein is produced in good faith and is believed to be reliable but is for guidance only. Fasto India and its agents cannot assume liability or responsibility for results obtained in the use of its product by persons whose methods are outside or beyond our control. It is the user's responsibility to determine the suitability of any of the products and methods of use or preparation prior to use mentioned in our literature and furthermore the user's responsibility to observe and adapt such precautions as may be advisable for the protection of personnel and property in the handling and use of any of our products.