

PRODUCT DESCRIPTION

Fasto A301 is a single component, general purpose anaerobic retaining compound. Fasto A301 is formulated for bonding cylindrical parts, to give high strength bonds. Once applied, parts slip together easily, lubricated by the adhesive.

A301 cures when confined in the absence of air between close-fitting metal surfaces.

TYPICAL APPLICATIONS

Fasto A301 is suitable for high strength retaining applications that require minimum gap filling. Typical applications include bonding gears onto shafts. A301 is designed to augment the strength of press fit and interference fit assemblies. Once applied, parts slip together easily, lubricated by the adhesive.

A301 prevents corrosion of assembling parts.

PROPERTIES OF UNCURED MATERIAL

| | Value |
|--|--------------------------|
| Chemical type | Dimethacrylate |
| Appearance | Green |
| Specific Gravity | 1.07 |
| Viscosity cPs ¹ | 125 |
| Shear Strength ² (N/mm ²) | 21 |
| Fixture Time ³ (min.) | 20 |
| Flash Point (°C) | >100 |
| Full cure (hours) | 24 |
| Max Gap Fill (mm) | 0.2 |
| Operating Temperature Range (°C) | -50 to +150 (continuous) |

1 Brookfield LVF Spindle 2, 2.5rpm

2 On mild steel pin and collar, ISO 10123

3 ISO 10964.

TYPICAL CURING PERFORMANCE

Typical Speed:

| | |
|----------|---------------|
| 20 mins | ~10% strength |
| 1 hours | ~50% 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. The larger the gap between surfaces, the slower the cure speed. Maximum recommended gap for Fasto A301 is 0.20mm, which will give approximately the cure schedule as detailed in the properties table.

Cure speed vs. Substrate

Cure speed and strength vary according to the substrates. When used on mild steel and brass components. Fasto A301 will reach full strength more rapidly than on more inert materials such as stainless steel and zinc dichromate. Anaerobic Adhesives only cure in the absence of air with metal part activation.

Cure speed vs. Activator

Where speed 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 up to 30%.Fasto recommends testing on the parts to measure the effect.

TYPICAL ENVIRONMENTAL RESISTANCE

Hot strength

Fasto A301 is suitable for use at temperatures up to 150°C. At 130°C the bond strength will be ~40% of the strength of at 21°C.

Heat ageing

Fasto A301 retains over 90% full strength when heated to 100°C for 90 days then cooled and tested at 21°C.

Chemical / Solvent Resistance

Fasto A301 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 area. Assemble parts and allow curing. 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. Please contact your Fasto India 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

Bottles: 50 ml & 250ml.

Available in bulk for use with dispensing system.

Please note: When packed an air space above the Product is vital to maintain stability.

LIMITATIONS

Fasto A301 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 plated 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.