

precote 85 - 3

High Strength Thread Pre-coating with Controlled Torque/Tension

Description

precote 85-3 is a varnish-like pre-coating system on base of microencapsulated epoxy-acrylate for sealing and locking of threaded parts. The dried film is tack-free, solvent free and physiologically harmless. Its characteristics as a locking and sealing element become effective only when the capsules are ruptured by shear and/or pressure stress and the adhesive is allowed to cure. precote 85-3 is an accelerated curing version of the established precote 85.

Application

On high-stressed threaded combinations with controlled friction which require a high locking effect. The product can be applied on screws, studs and no standardized parts as well as on thread plugs and pipe threads. After curing the connection exhibits a high break-away torque, without compromising the disassembly by a high prevail off torque. The required strength acc. DIN 267 part 27 is achieved within two hours at room temperature. No uncontrolled post curing occurs even after repeated temperature exposure.

For threads \leq M6 or pitch \leq 1mm we recommend precote 85-3-8.

Properties

- Forms a dry and tack-free film.
- Captive part of the thread.
- Physiologically harmless as coating and as assembly.
- Threaded parts can be preapplied long time before assembly (oT coating machine).
- Seals against pressure up to 400 bar (5760 psi).
- Retains torque performance even at +170°C.
- Prevents corrosion in the threaded connection.
- Fast curing - no post curing even after repeated temperature exposure.
- Low thread friction.
- Good chemical resistance (meets the relevant automotive specifications).
- Complies with DIN 267, part 27.

Technical data - precote 85 - 3

colour	turquoise / UV marker yellow
thread friction value μ_{thread}	0.10 - 0.15
curing time (RT) (to achieve the values acc. DIN 267 part 27)	2 h
prevailing-in torque (PIT) on assembly*	0.8 – 1,4 Nm
strength without preload BAT* oT standard 2.7.1** resp. DIN 267, part 27	min. 20 N after 24 h (min. 10 Nm after 0,5h)
strength ratio BLT/M_A^* oT standard 2.7.3** resp. DIN 267, part 27	> 1.2
prevailing-out torque POT	< DIN 267, part 27
temperature range	-60°C to +170°C
remaining strength after heat aging (2,000 h at +200 °C)	100 %
shelf-life	4 years at room temperature 27/65 DIN 50 014

*All values apply to screws M10 ISO 4017-8.8 plain finish and nuts M10 ISO 4032-10 plain finish comply with DIN 267, part 27.

** oT standards available on request.

04/11

Guarantee: As we do not know the specimen, dimensions, materials, combinations, surface conditions etc. of the threads in question, it is absolutely essential to run quality tests prior to general use to make sure about the required performance under field conditions. Our guarantee is confined to supplying precote in proper quality. In view of the fact that processing of precote by the coating partner and the application of precote coated parts are beyond our knowledge and influence we cannot guarantee for the quality of parts coated with precote and assemblies made thereof. We accept liability for the fitness of our products for particular purposes and liability for particular qualities of our products only in the event that we have accepted such liability in writing in the individual case. In any event any justified warranty claims shall be limited to the delivery of replacement goods which are free from defect or, in the event that such subsequent improvement fails, to reimbursement of the purchase price. Any and all further claims, in particular but without limitation any liability for consequential damage, shall be excluded.