

precote 87

precote 87-3, precote 87-8

**High-Strength and Heat-Resistant Thread Coating
with Increased Installation Torque**

Description

precote 87, precote 87-3 and precote 87-8 are varnish-like, solvent free coating systems based on microencapsulated acrylates for sealing and locking of threaded parts. The dried film is tack-free, non sticky and can be used in all kind of assembly procedures.

Its characteristics as a locking and sealing element become effective only when the capsules are ruptured by shear and pressure stress and the adhesive is allowed to cure.

Application

All versions of precote 87 are high strength thread locking coatings with a locking effect even at high temperatures where a higher installation torque is required. They can be used on all types of external and internal threads.

precote 87-8 is especially recommended for locking of screws \leq M4.

- precote 87: Thread locker for threads $>$ M6 or pitches $>$ 1mm.
- precote 87-3: Recommended for accelerated curing for threads $>$ M6 or pitches $>$ 1mm.
Yellow UV marker visible under UV light.
- precote 87-8: Recommended thread locker for threads \leq M6 or pitches \leq 1mm.
White UV marker visible under UV light.
- precote 87-3-8: Recommended for accelerated curing for threads \leq M6 or pitches \leq 1mm.
White UV marker visible under UV light.

Properties

- precote 87 and precote 87-8 exceed the required values of DIN 267-27 after 6 hours curing at RT. Fast curing precote 87-3 exceeds these values after 30 minutes.
- Temperature range up to +170°C (+340°F) (DIN 267-27), resp. +200°C (+390°F) (GMW 14657).
- Sealing up to 400 bar (5760 psi).
- Good chemical and temperature resistance.
- Forms a dry and tack free film.
- Captive part of the thread.
- No post-curing even after repeated temperature exposure.
- Prevents corrosion in the threaded connection.

Technical Data

Chemical Type	Acrylate
Color	red / red-brown
Thread friction μ_{Thread}	> 0,25
Curing time* at RT to exceed the values according to DIN 267-27	precote 87: 6h precote 87-8: 6h precote 87-3: 0,5h
Prevailing-in torque PIT on assembly*	2 - 2,7 Nm
Strength without preload BAT*	> 20 Nm
Strength with preload BLT*	> 1,2 x M _A
Prevailing-out torque POT according to DIN 267-27	< 55 Nm
Temperature range according to DIN 267-27	-60°C to +170°C -75°F to +340°F
Temperature range according to GMW 14657	-60°C to +200°C -75°F to +390°F
Good chemical resistance: meets or exceeds the relevant automotive specifications and DIN 267-27	

*All values apply to screws M10 ISO 4017-8.8 plain finish and nuts M10 ISO 4032-10 plain finish, all other thread sizes comply with DIN 267-27. All other surfaces have also to be tested according to DIN 267-27 Annex A.

Shelf-life 4 years at max.30°C and max. 65% relative humidity

Storage and transport conditions can be taken from the omniTECHNIK packaging information.

Releases

- Bosch F00 VC19 106

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Note: 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.