

# precote 80

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precote 80-3, precote 80-8 High-Strength and Heat-Resistant Thread Coating

### Description

precote 80, precote 80-3 and precote 80-8 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 80 are high strength thread locking coatings with a locking effect even at high temperatures. They can be used on all types of external and internal threads.

| •               | precote 80:     | Thread locker for threads > M6 or pitches > 1mm.                      |
|-----------------|-----------------|-----------------------------------------------------------------------|
| •               | precote 80-3:   | Recommended for accelerated curing for threads > M6 or pitches > 1mm. |
|                 |                 | Yellow UV marker visible under UV light.                              |
| • precote 80-8: |                 | Recommended for threads $\leq$ M6 or pitches $\leq$ 1mm.              |
|                 |                 | White UV marker visible under UV light.                               |
| •               | precote 80-3-8: | Recommended for accelerated curing for threads ≤ M6 or pitches ≤ 1mm. |
|                 |                 | White UV marker visible under UV light.                               |



## **Properties**

- precote 80 and precote 80-8 exceed the required values of DIN 267-27 after 6 hours curing at RT. Fast curing precote 80-3 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.
- Thread friction must be considered on assembly.
- Prevents corrosion in the threaded connection.

## **Technical data**

| Chemical Type                                     | Ac            | rylate             |  |  |  |
|---------------------------------------------------|---------------|--------------------|--|--|--|
| Color                                             | red /         | green              |  |  |  |
| Thread friction $\mu_{Thread}$ > 0,25             |               | <i>&gt; 0,</i> 25  |  |  |  |
| Curing time* at RT                                | precote 80:   | 6h                 |  |  |  |
| to exceed the values                              | precote 80-8: | 6h                 |  |  |  |
| according to DIN 267-27                           | precote 80-3: | 0,5h               |  |  |  |
| Prevailing-in torque PIT on assembly*             | < 1,          | 8 Nm               |  |  |  |
| Strength without preload BAT*                     | > 2           | .0 Nm              |  |  |  |
| Strength with preload BLT*                        | > 1,2         | . x M <sub>A</sub> |  |  |  |
| Prevailing-out torque POT                         | < 5           | 5 Nm               |  |  |  |
| according to DIN 267-27                           |               |                    |  |  |  |
| Temperature range                                 | -60°C to +1   | 170°C              |  |  |  |
| according to DIN 267-27                           | -75°F to +    | 340°F              |  |  |  |
| Temperature range                                 | -60°C to +2   | 200°C              |  |  |  |
| according to GMW 14657                            | -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

| precote 80 |
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|------------|

| Pic          |                        |                                       |  |  |
|--------------|------------------------|---------------------------------------|--|--|
| •            | Audi                   | DIN 267-27                            |  |  |
| ٠            | Bendix                 | BW - 291 P                            |  |  |
| •            | BL BLS                 | 22.FP.01                              |  |  |
| •            | BMW                    | DIN 267-27                            |  |  |
| •            | Bosch                  | N38A SR9.3 and N38A SR9.5             |  |  |
| •            | British Leyland        | BLS 22. FP.01                         |  |  |
| •            | Chrysler               | MS-CC76 A+C                           |  |  |
| •            | Chrysler               | MCSD7 PF-6616                         |  |  |
| •            | DIN                    | DIN 267-27                            |  |  |
| •            | Fiat                   | DT-M-SFA-SSM                          |  |  |
| •            | Ford                   | ES 20007- S 100                       |  |  |
| •            | Ford                   | WX 200 WSS M11 P45-A1                 |  |  |
| •            | GM / Opel              | GME 00151 and GM 6124M                |  |  |
| •            | GM / Opel              | GM 6175 M                             |  |  |
| •            | GM / Opel              | GM 6193 M                             |  |  |
| •            | GM / Opel              | GM 6194 M                             |  |  |
| •            | IFI                    | IFI 125                               |  |  |
| •            | IFI                    | IFI 525                               |  |  |
| •            | KHD                    | H 2812                                |  |  |
| •            | Magneti Marelli        | CQ N° 137                             |  |  |
| •            | MIL - S - 46163        |                                       |  |  |
| •            | PSA (Peugeot, Citroen, | B141 230                              |  |  |
|              | Talbot)                |                                       |  |  |
| •            | Renault                | 39.02.010                             |  |  |
| •            | Rockwell International | Q - 52                                |  |  |
| •            | Rover                  | RES. 22.FP.01                         |  |  |
| •            | Saab Scania            | STD - 1627 (1508446 SB)               |  |  |
| •            | Volvo                  | STD 416 - 0001 material number 391285 |  |  |
| •            | VW                     | DIN 267-27                            |  |  |
| •            | VW                     | 601 05                                |  |  |
| precote 80-3 |                        |                                       |  |  |
| •            | Porsche                | 1230                                  |  |  |

October 2013

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.