

precote 30

Technical Data Sheet



precote 30-3, precote 30-8 Medium Strength Coating with Controlled Friction.

DESCRIPTION

precote 30, precote 30-3 and precote 30-8 are varnish-like, solvent-free coating systems based on microencapsulated acrylates for sealing and locking of threaded parts.

The dried film is tack-free and non-sticky. The microcapsules are destroyed by compressive and shear stress during assembly, and the released components mix and harden.



APPLICATION

All versions of precote 30 are medium strength thread locking coatings with a high sealing effect. They can be used on all types of external threads.

precote 30: for threads > M6 and pitches > 1mm

precote 30-3: accelerated curing for threads > M6
Yellow UV marker visible under UV light

precote 30-8: for threads ≤ M6 or
pitches ≤ 1mm to max. M10x1
White UV marker visible under UV light

The physical data and chemical resistance of precote 30-3 and precote 30-8 match with the data of the standard version precote 30 after complete curing.

The coating can be used in all kind of assembly procedures, particularly for serial production.

Areas of application are electronics, two wheel and automotive industry, household appliances, office machines, computer industry, electric motors, e-mobility, etc.

STORAGE

Shelf-life of coated parts four years at max. 30°C and max. 65% relative humidity.

Please note the omniTECHNIK packaging information.

PROPERTIES

- precote 30 and precote 30-8 meet the required values of DIN 267-27 after 6 hours curing at RT. Fast curing precote 30-3 meets these values after 30 minutes
- Constant assembly properties
- Temperature range up to +150°C (+300°F)
- Low, controlled friction
- Good thermal and chemical 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

ALL VERSIONS OF PRECOTE 30 MEET AND EXCEED TECHNICAL SPECIFICATIONS OF FOLLOWING COMPANIES

Aisin, Audi, Autoliv, BASF, Bendix, BMW, Bosch, Bridgestone/Firestone, Brose, Chrysler, Continental, Cummins, DAF, Daimler, Dana, Delphi, Denso, Faurecia, Fiat, Ford, Geely, General Motors, Getrag, Hitachi, Honda, Hyundai Kia, Hyundai Mobis, Johnson Controls, KWC, Lear, Magna, Magneti Marelli, Mahle, MAN, Michelin, Opel, Panasonic (Matsushita Electric), Perkins, Porsche, PSA, Renault, Rover, Saab Scania, Schaeffler, Siemens, Stihl, Tesla, Toyota, TRW Automotive, Valeo, Volvo, VW, ZF Friedrichshafen and many more.

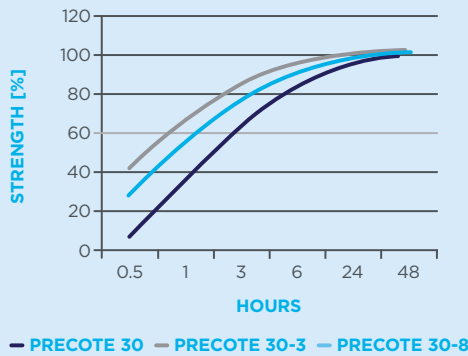
Information presented in this data sheet is considered reliable, but conditions and methods of use, which are beyond our control, may modify results. Before these product are used, the user should confirm their suitability. We cannot accept liability for any loss, injury or damage which may result from its use. We do not warranty the accuracy or completeness of any such information whether orally or in writing. We reserve the right at anytime and without notice to update or improve products and processes and our information concerning the same.

TECHNICAL DATA

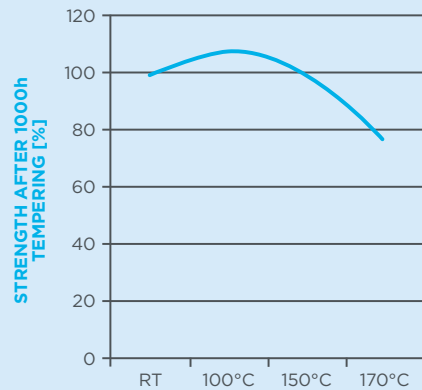
Chemical Type	Acrylate																		
Colour¹	Yellow																		
Thread Friction μThread²	0.10 - 0.15																		
Sealing Properties at RT in Air Threads Cylindrical/Cylindrical Threads Cylindrical/Conical	tested up to 200 bar tested up to 250 bar																		
Curing Time³ at RT to Final Strength	ca. 24h																		
Curing Time³ at RT to Exceed the Values According to DIN 267-27	precote 30: 6h precote 30-8: 6h precote 30-3: 0.5h																		
Prevailing-in Torque PIT on Assembly³	<3 Nm																		
Strength Without Preload BAT³	>15 Nm																		
Prevailing-out Torque POT³	<M _{Lb}																		
Temperature Range³	-60°C to +150°C -75°F to +300°F																		
Chemical Resistance Tested According to all Current Automotive Standards and DIN 267-27, Storage Time 1000h	<table border="0"> <tr> <td>Engine Oil</td> <td>Test Temperature</td> </tr> <tr> <td>Super-Grade Gasoline</td> <td>150°C</td> </tr> <tr> <td>DOT4 Brake Fluid</td> <td>23°C</td> </tr> <tr> <td>Anti-Freeze 100%</td> <td>90°C</td> </tr> <tr> <td>Anti-Freeze/Water 50:50</td> <td>120°C</td> </tr> <tr> <td>Automatic Transmission Oil</td> <td>120°C</td> </tr> <tr> <td>Transmission Oil</td> <td>150°C</td> </tr> <tr> <td>Polyurea AdBlue®</td> <td>120°C</td> </tr> <tr> <td></td> <td>23°C</td> </tr> </table>	Engine Oil	Test Temperature	Super-Grade Gasoline	150°C	DOT4 Brake Fluid	23°C	Anti-Freeze 100%	90°C	Anti-Freeze/Water 50:50	120°C	Automatic Transmission Oil	120°C	Transmission Oil	150°C	Polyurea AdBlue®	120°C		23°C
Engine Oil	Test Temperature																		
Super-Grade Gasoline	150°C																		
DOT4 Brake Fluid	23°C																		
Anti-Freeze 100%	90°C																		
Anti-Freeze/Water 50:50	120°C																		
Automatic Transmission Oil	120°C																		
Transmission Oil	150°C																		
Polyurea AdBlue®	120°C																		
	23°C																		

¹ This product information is also valid for special colours. The specified colour is not a primary product feature. The colour may vary slightly due to the manufacturing process and the formulation. This does not affect the quality of the product.
² Test according to DIN EN ISO 16047. All values apply to screws ISO 4017 M10x55-8.8- plain finish and nuts ISO 4032 M10-10- plain finish. All other surfaces could deliver different values.
³ Test according to DIN 267-27. All values apply to screws ISO 4017 M10x35-8.8- plain finish and nuts ISO 4032 M10-10- plain finish. All other surfaces could deliver different values.

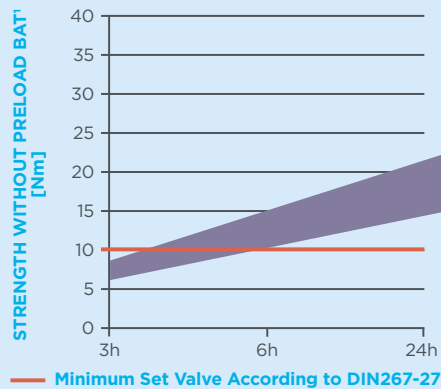
CURING PROGRESS



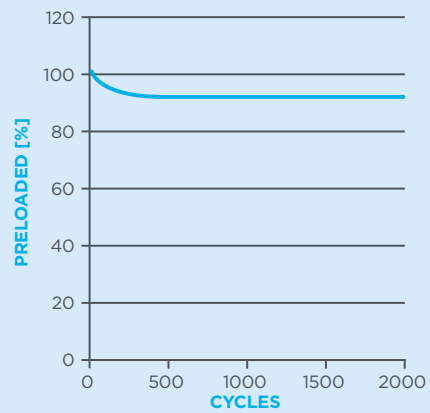
TEMPERATURE STABILITY AFTER 1000h



RANGE OF STRENGTH WITHOUT PRELOAD BAT¹



VIBRATION TEST ACCORDING TO JUNKERS DIN 65151 & ISO



¹ Test according to DIN 267-27. All values apply to screws ISO 4017 M10x35-8.8- plain finish and nuts ISO 4032 M10-10- plain finish. All other surfaces could deliver different values.