



TECHNICAL DATA

ZYROBOND® AN 3271

Anaerobic Thread Locking Compound

AN 3271 is a fast curing, high strength anaerobic thread locking compound for bonding and sealing threads and for retaining cylindrical parts.

AN 3271 is highly resistant to heat, vibration, water, gases, oils, hydrocarbons and many chemicals.

Meets Military Specification: MIL-S-46163 Type II Grade K
MIL-S-22473E Letter Grade CVV

APPLICATIONS:

- Ideal for fasteners up to 25mm (1").
- For motor and machine studs, drive fasteners, valve threads etc.
- For joints requiring permanent bonding and high resistance to vibrations.
- Excellent for slightly oily surfaces.

Adhesive Properties:

Composition:	Dimethacrylate Ester
Colour:	Red
Viscosity: (Brookfield RVT Spindle 3 @ 20 rpm)	500 cps @ 25°C
Specific Gravity:	1.11
Maximum Thread Ø:	1½" (M36)
Gap Fill:	0.15 mm
Flash Point:	> 100°C

Curing Properties:

Working Time:	10 min.	
Functional Cure:	1 - 3 hrs.	
Full Cure:	24 hrs.	
Breakaway Torque: (M10 steel nuts & bolts)	26 N.m.	ISO 10964
Prevail Torque: (M10 steel nuts & bolts)	36 N.m.	ISO 10964
Breakloose Torque		
Pre-torqued to 5 N.m: (M10 steel nuts & bolts)	37 N.m.	ISO 10964
Max. Prevail Torque		
Pre-torqued to 5 N.m: (M10 steel nuts & bolts)	58 N.m.	ISO 10964
Shear Strength: (steel shaft and hub)	8 N.m.	ISO 10964
Temperature Resistance:	-55 to +150°C	



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Physical Properties:

Coefficient of Thermal Expansion:	80×10^{-6}	ASTM D 696, K-1
Coefficient of Thermal Conductivity:	0.10	ASTM C 177, W/(m·K)
Specific Heat:	0.30	kJ/(kg·K)

Chemical Resistance:

Material	Temperature	% Initial Strength Retained	
		500 Std.	1000 Std.
Acetone:	22°C	95	90
Ethanol:	22°C	100	100
Motor Oil:	125°C	95	95
Petrol/Gasoline:	22°C	100	100
Brake Fluid:	22°C	100	100
Water/Glycol:	87°C	95	80

Instructions for use:

The surface should be clean, dry and free from contaminants such as oil or grease. It is recommended to apply the product ensuring that the spacing between the threads is sufficiently filled. For through-holes: Apply the product to the screw in the area where the nut will sit. For blind holes: Apply the product to the lower third of the inner thread or to the bottom of the bore. Disassembly: Low and medium strength anaerobic adhesives can be disassembled using standard hand tools. High strength anaerobic adhesives must be heated to 250°C - 300°C.

Cleaning: Lay the cured product in solvent and then mechanically remove the residue.

Storage

Anaerobic adhesives should be stored in a cool, dry place at a room temperature between 8°C to 28°C. The shelf life is at least 1 to 2 years (depending upon storage conditions). Product residue should not be returned to the original container, in order to preserve the original properties.

Additional Information: 1.) Permanently installed connections may not be realigned. Should it be necessary to remove the thread, it must be completely removed and cleaned, then the fitting can be sealed again using a fresh product application. As a realignment of pre-assembled threaded connections is not possible, this product, along with other liquid or anaerobic sealants is not to be used for gas installations according to DVGW-TRGI. 2.) This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials. Stress cracking can occur when used on thermoplastic. It is recommended to test compatibility on plastics before use.

General information: The information contained herein serves merely as an indication and is given to the best of knowledge. The users must test the suitability of the product for her/its/their respective application independently however. All products purchased from or supplied by Nohtec are subject to terms and conditions set out in the contract. Nohtec warrants only that its product will meet those specifications designated as such herein or in other publications. All other information supplied by Nohtec is considered accurate but are furnished upon the express condition the customer shall make its own assessment to determine the product's suitability for a particular purpose. Nohtec makes no other warranty, either express or implied, including those regarding such other information, the data upon which the same is based, or the results to be obtained from the use thereof; that any product shall be merchantable or fit for any particular purpose; or that the use of such other information or product will infringe any patent.