



TECHNICAL DATA

ZYROBOND® AN 3603 Anaerobic Retaining Compound

AN 3603 is a high strength retaining compound for cylindrical fittings with narrow tolerances.

AN 3603 is used on tight-fitting metal surfaces in order to prevent loosening and leakage caused by vibration or shock.

AN 3603 is especially recommended for materials with slightly oily surfaces and where ideal cleaning is not possible.

Meets Military Specification: MIL-R-46082B Type I.

APPLICATIONS:

- Roller bearings, ball bearings in pumps.
- Cuffs and sleeves.
- Wheels, sprockets, gears, flywheels, belt pulleys.
- Securing roller bearings or oil impregnated bushings in bearing housings.

Adhesive Properties:

Composition:	Urethane Methacrylate
Colour:	Green
Viscosity: (Brookfield RVT Spindle 3 @ 20 rpm)	500 @ 25°C
Specific Gravity:	1.05
Gap Fill:	0.10 mm
Flash Point:	> 100°C

Curing Properties:

Working Time:	10-12 min.	
Functional Cure:	1 - 3 hrs.	
Full Cure:	24 hrs.	
CompressiveShear Strength:		
After 24 hours at 22°C (steel shaft and hub)	20 - 32 N/mm ²	ISO 10123
After 30 min at 22°C (steel shaft and hub)	13 - 15 N/mm ²	ISO 10123
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	100	95
Ethanol:	22°C	100	100
Motor Oil:	125°C	100	100
Petrol/Gasoline:	22°C	100	100
Brake Fluid:	22°C	100	100
Water/Glycol:	87°C	90	85

Instructions for use:

The surface must be clean, dry and free of contaminants such as oil or grease. If the material consists of passive metal, or if the cure is too slow, an activator should be used. Shake thoroughly before use.

Push Fittings: Apply the adhesive ring-like on the outer edge of the shaft and on the inside of the hub and turn the parts against each other during assembly to ensure an optimal distribution of the adhesive.

Press Fittings: Apply the glue evenly to the operative area and press the parts together quickly.

Shrink Fittings: Apply the adhesive onto the shaft and the heat the hub to create enough play for the parts. The parts should not be moved until the handling strength is achieved.

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: Insert the cured product in solvent and then mechanically remove.

For maximum pressure and solvent resistance, allow the product to harden for at least 24 hours.

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.