BORN2BOND PA-WL

THREAD SEALANT, HIGH VISCOSITY, ANAEROBIC ADHESIVE

TECHNICAL DATA SHEET

August 2025

PRODUCT DESCRIPTION

Bostik Born2Bond™ Not CLP Classified range is specially designed to enhance the work environment and ease the EHS assessment of a new product without compromise on performance.

Born2Bond™ PA-WL anaerobic adhesives are a reliable, adaptable solution, suitable for all types of threaded metal pipes and fittings, and both new installations and preventative maintenance. Filling and sealing all voids, these single component adhesives provide 100% surface-to-surface contact, achieving a cohesive, durable connection that will not fail even when subjected to vibration, extreme temperatures or chemical substances. A convenient, cost-effective alternative to conventional sealing alternatives like hemp or PTFE tapes, these adhesives eliminate the need for additional inventory.

Born2Bond™ PA-WL Pipe Sealant is a general purpose anaerobic thread sealant material with high viscosity and medium strength. Once cured the product prevents leakage and/or loosening of parts from vibration and shock.

For more information, please consult:
https://born2bond.bostik.com

KEY FEATURES

- Not CLP Classified
- Medium Strength
- High Viscosity
- Instant seal 10 bar
- High pressure seal - 350 bar
- 100% connection - no loosen in
- Vibration resistant
- Corrosion prevention
- Single component
- Variety of viscosities and strengths
- Suitable for active and passive metals

DIRECTION FOR USE

1. For best results, clean all surfaces (internal and external) with Born2Bond™ Pre-Bonding cleaner and wait until fully evaporated.
2. If the cure speed is too slow of on inactive metals, use Born2Bond™ Anaerobic Activator.
3. Apply the product into the threads, leaving the first thread free. Fill all voids thoroughly.
4. Properly tighten fittings with suitable tools. It will seal instantly to moderate pressures.
5. Wait for full cure to get maximum pressure resistance.

METHOD OF USE

- Manual: Directly from the bottle with or without dispensing tips for more precise dispensing.
- Semi-Automated: Use of pressure-time systems for accurate volume and larger series.
- Full-Automated: fully automated robot or application lines.

APPLICATIONS

- Engines and powertrains
- Pumps and compressors
- Liquid and gas storage
- Hydraulic systems
- Metal pipes and fittings

MDM-52474-01-WW

LIMITATIONS

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. Material removed from containers may be contaminated during use. Do not return product to the original container. Bostik will not assume responsibility for product that has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or customer service representative.

STORAGE & SHELF LIFE

Store product in the unopened container in a dry area out of direct sunlight. Storage below 7 °C or greater than 28 °C can adversely affect product performance. If stored properly, this product has a shelf life of 24 months.

HEALTH & SAFETY

The Safety Data Sheet is available on the Bostik website and should be consulted for proper handling, cleanup and spill containment before use. Keep containers covered to minimize contamination.

PRODUCT CHARACTERISTICS

Basis Technology	Anaerobic acrylic adhesive
Components	1K
Colour	Yellow (UV Fluorescence)
Cure	Anaerobic
Temperature Use Range	-55 °C - +180 °C
Maximum Thread Size	M56

UNCURED PHYSICAL PROPERTIES

Viscosity	[mPa·s]	100,000 - 200,000
Brookfield: Sp7 @ 20 rpm, 25 °C		
Specific Gravity		1.1
ASTM D1475-13 (2020)		

CURING PROPERTIES

The table below shows the curing properties of the product on mild steel.

Fixture Time @ 20 °C	[min]	30
Full Cure @ 20 °C	[hours]	24

BONDING PERFORMANCE

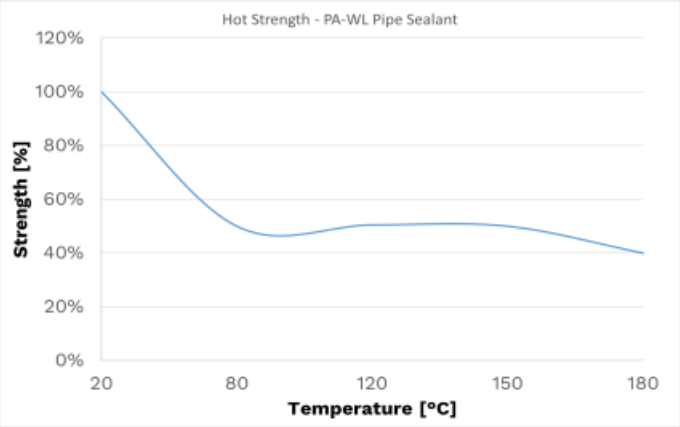
The performance data reported below was measured according to ISO 10964. The product was applied to M10 metal bolts and cured for one week at 22 °C before being tested.

Breakaway torque without preload	Brass	7 Nm
Breakaway torque without preload	Black Oxide	27 Nm
Breakaway torque without preload	Galvanized Steel	13 Nm
Breakaway torque without preload	Stainless Steel	3 Nm
Breakaway torque with preload 5 Nm	Galvanized Steel	13 Nm
Breakaway torque with preload 5 Nm	Stainless Steel	10 Nm
Prevail torque without preload	Brass	4 Nm
Prevail torque without preload	Black Oxide	8 Nm
Prevail torque without preload	Galvanized Steel	4 Nm
Prevail torque with preload 5 Nm	Galvanized Steel	3 Nm
Prevail torque with preload 5 Nm	Stainless Steel	1 Nm

HOT STRENGTH

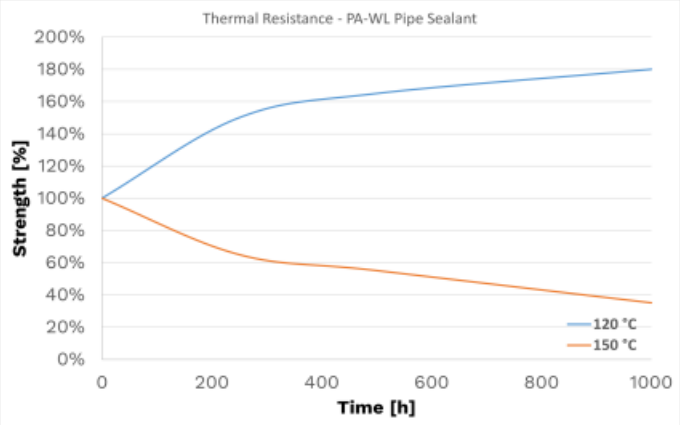
The data below shows the adhesive performance on M10 mild steel bolts at various temperatures. The adhesive was cured for one week at 22 °C. The breakaway strength was tested according to ISO 10964. The strength test was performed after the specimen was heated for 30 minutes at the indicated temperatures.

Remaining strength @ 150 °C	%	51
Remaining strength @ 180 °C	%	39



THERMAL RESISTANCE

The data below shows the performance of adhesive M10 mild steel bolts at different temperatures. The adhesive was cured for one week at 22 °C. Breaking strength was tested according to ISO 10964.



CHEMICAL/SOLVENT RESISTANCE

The data below shows the performance of the adhesive on M10 mild steel bolts after exposure to various contaminants. The breakaway strength was tested according to ISO 10964.

% initial resistance in relation to exposure time (hours) and type of contaminant.

Testing on Galvanized Steel		% of initial Strength		
ENVIRONMENT	**TEMP**	**250 h**	**500 h**	**1000 h**
Engine Oil	125 °C	118	61	66
Gasoline	23 °C	98	57	94
Brake Fluid	23 °C	122	80	112
Water/Glycol (50/50)	87 °C	210	251	219

CONVERSIONS

(°C x 1.8) + 32 = °F
kV/mm x 25.4 = V/mil
mm / 25.4 = in
µm / 25.4 = mil
N x 0.225 = lb
N/mm x 5.71 = lb/in
N/mm2 x 145 = psi
MPa x 145 = psi
N·m x 8.851 = lb·in
N·mm x 0.142 = oz·in
mPa·s = cP

DISCLAIMER

Bostik offers this Technical Data Sheet (TDS) for descriptive and informational use only. It is not a warranty, a contract or a substitute for expert or professional advice. Please also see the local product Safety Data Sheet for health and safety considerations. The statements, technical information, data, and recommendations contained in this TDS are provided 'AS IS' and are not warranted or guaranteed in any way. They represent typical results for the products and are based on Bostik's research only. Since the conditions and methods of use of the products are beyond our control, Bostik expressly disclaims any and all liability and damages of whatever kind or nature that may arise from any use of the products, the results therefrom, or reliance on the information contain herein. This TDS is one of several tools that may be used to help you find the product best suited for your needs. It is used at your own risk, and by using it, you are knowingly accepting and assuming any and all risks associated with its use and recommendations. BUYERS AND USERS ASSUME ALL RESPONSIBILITY AND LIABILITY FOR ANY AND ALL LOSS OR DAMAGE OF WHATEVER KIND OR NATURE ARISING FROM OR RELATED TO THE HANDLING OR USE OF BOSTIK'S PRODUCTS. The performance of the product, its shelf life, and application characteristics will depend on many variables, including but not limited to the kind of materials to which the product will be applied, the environment in which the product is stored and/or applied and the equipment used for application, among other things. Any change in any of these variables can affect the product's performance. You are responsible to test the suitability of any product in advance for any intended use or application. Bostik does not guarantee the reliability, completeness, use, or function of the statements, technical information, data, and recommendations contained in this TDS. Nothing contained herein constitutes a license to practice under any patent, and it should not be construed as an inducement to infringe any patent. You are advised to take appropriate steps to be sure that any proposed use of the products will not result in patent infringement. The information provided herein relates only to the specific products designated and may not be applicable when such products are used in combination with other materials or in any process. The product is sold pursuant to a supply agreement and/or Bostik's Terms and Conditions of Sale, which set forth the sole warranty, if any, that applies to the product. NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR WARRANTY OF MERCHANTABILITY, IS MADE CONCERNING THE PRODUCTS DESCRIBED OR THE INFORMATION PROVIDED HEREIN, AND TO THE MAXIMUM EXTENT ALLOWED BY LAW, SUCH WARRANTIES ARE HEREBY DISCLAIMED. BOSTIK DISCLAIMS ANY LIABILITY FOR DIRECT, INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES TO THE MAXIMUM EXTENT ALLOWED BY LAW.

MDM-52474-01-WW