BORN2BOND TA-WL LOW STRENGTH

LOW STRENGTH, MEDIUM VISCOSITY, THREADLOCKING 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.

Bostik Born2Bond™ Threadlocking anaerobic adhesives provide single component, one-stop solutions for all threalocking requirements, including preventive maintenance. Eliminating the cost and incovenience of holding extensive inventory, these liquid adhesives fill and seal all voids to achieve a cohesive connecton of metal parts that remains fixed even when subjected to extreme vibrations, temperatures or chemical substances.

Born2Bond™ TA-WL Low Strength is designed to lock and seal threaded fasteners which requiere easy disassembly with normal hand tools. 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
- Low Strength
- Medium Viscosity
- Colour: Purple
- 100% connection - no loosening
- Evenly distribute force
- Vibration resistant
- Corrosion prevention
- Single component
- 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, use Born2Bond Anaerobic Activator.
3. Shake the product before use.
4. Apply adhesive onto threads.
5. Assemble and tighten as required.

METHOD OF USE

- Manual: Directly from the bottle with or without dispensing cannula 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

- Mechanical parts assembly
- Machine engineering
- Gear manufacturing
- Engines and powertrains

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.

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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	Purple (UV fluorescence)
Cure	Anaerobic
Temperature Use Range	-55 °C - +150 °C
Maximum Thread Size	M6

UNCURED PHYSICAL PROPERTIES

Viscosity Brookfield: Sp3 @ 20 rpm, 25 °C	[mPa·s]	900 – 1,500
Specific Gravity ASTM D1475-13 (2020)		1.06

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

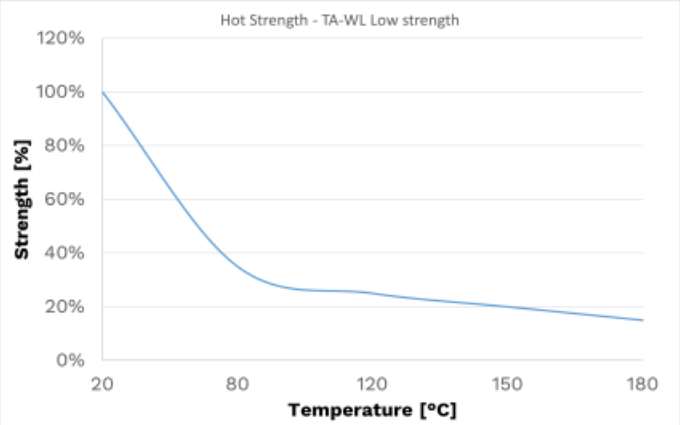
The performance data reported below was measured according to ISO 10964. The product was applied to M10 metal bolts and cured for one week at 22 °C before being tested.

Breakaway torque without preload	Brass	5 Nm
Breakaway torque without preload	Black Oxide	7 Nm
Breakaway torque without preload	Galvanized Steel	12 Nm
Breakaway torque without preload	Stainless Steel	3 Nm
Breakaway torque with preload 5 Nm	Black Oxide	10 Nm
Breakaway torque with preload 5 Nm	Galvanized Steel	10 Nm
Breakaway torque with preload 5 Nm	Stainless Steel	7 Nm
Prevail torque without preload	Brass	4 Nm
Prevail torque without preload	Black Oxide	2 Nm
Prevail torque without preload	Galvanized Steel	6 Nm
Prevail torque without preload	Stainless Steel	1 Nm
Prevail torque with preload 5 Nm	Black Oxid	3 Nm
Prevail torque with preload 5 Nm	Galvanized Steel	3 Nm
Prevail torque with preload 5 Nm	Stainless Steel	2 Nm

HOT STRENGTH

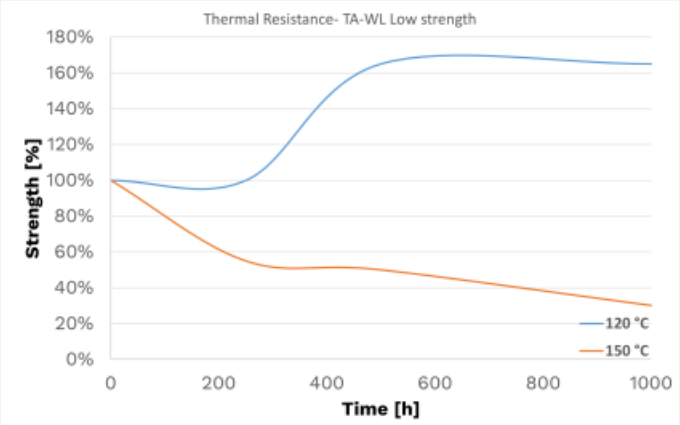
The data below shows the adhesive performance on M10 mild steel bolts at various temperatures. The adhesive was cured for one week at 22 °C. The breakaway strength was tested according to ISO 10964. The strength test was performed after the specimen was heated for 30 minutes at the indicated temperatures.

Remaining strength @ 150 °C	%	21
Remaining strength @ 180 °C	%	13



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	23	23	24
Gasoline	23 °C	29	32	23
Brake Fluid	23 °C	33	45	31
Water/Glycol (50/50)	87 °C	77	67	56

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

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