BORN2BOND RA-WL HIGH STRENGTH

HIGH STRENGTH, MEDIUM VISCOSITY, RETAINING 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™ Retaining anaerobic adhesives are a cost effective, adaptable alternative or addition to mechanical retaining processes. Capable of bonding all types of cylindrical assemblies, these singlecomponent solutions also seal all metal joints to eliminate the risk of fretting corrosion. They achieve 100% surface-to-surface contact, producing a cohesive, durable connection capable of withstanding vibration, extreme temperatures and chemical substances.

Born2Bond™ RA-WL High Strength is a medium viscosity, high strength anaerobic adhesive designed to retain cylindrical parts. 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.
- High Strength
- Medium Viscosity
- Colour: Green
- High power transmission
- Resistance to dynamic loads
- Vibration resistant
- Corrosion prevention
- Single component

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 on inactive metals, use Born2Bond™ Anaerobic Activator.
3. For slip fitted parts, apply the adhesive around the pin and the inside of the collar and rotate during assembly to ensure fully coverage.
4. For press fitted parts, apply adhesive fully to both surfaces and assemble at high pressure.
5. For shrink fitted parts, the adhesive should be on the pin, the collar should be heated.
6. Parts should be fixed until sufficient handling strength is achieved.

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

- Gear manufacturing fleche
- Machine engineering
- Bearing assembly
- Drive shafts

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.

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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	Green (UV Fluorescence)
Cure	Anaerobic
Temperature Use Range	-55 °C - +180 °C
Maximum Gap Fill	0.25 mm

UNCURED PHYSICAL PROPERTIES

Viscosity	[mPa·s]	350 - 550
Brookfield: Sp2 @ 20 rpm, 25 °C		
Specific Gravity		1.10
ASTM D1475-13 (2020)		

CURING PROPERTIES

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

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

BONDING PERFORMANCE

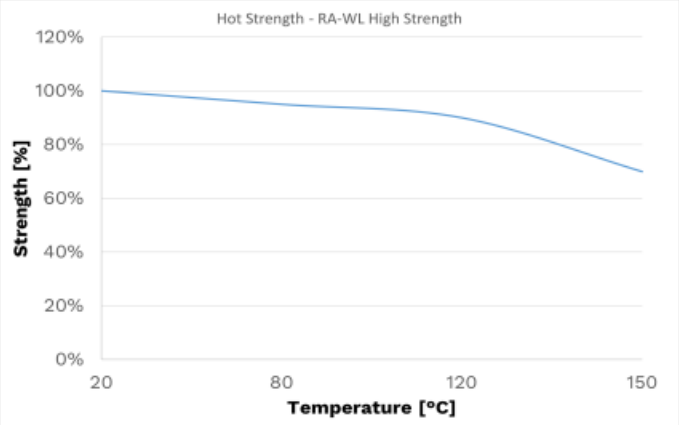
The performance data reported below was measured according to ISO 10123. The product was applied to pin&collar assembly on different metals and cured for one week at 22 °C before being tested.

Breakaway torque without preload	Black Oxide	
Breakaway torque without preload	Galvanized Steel	
Prevail torque without preload	Black Oxide	
Prevail torque without preload	Galvanized Steel	
Pin & Collar - Compressive Shear Strength	Mild Steel	11N/mm²
Pin & Collar - Compressive Shear Strength	Stainless Steel	5 N/mm²
Pin & Collar - Compressive Shear Strength	Aluminium	6 N/mm²

HOT STRENGTH

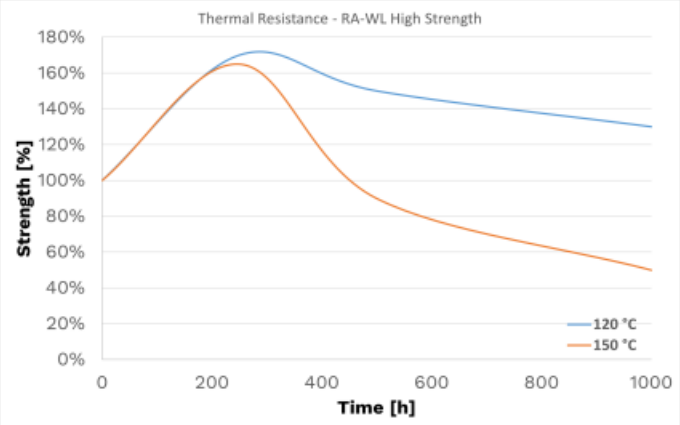
The data below shows the adhesive performance on M10 mild steel bolts at various temperatures. The adhesive was cured for one week at 22 °C. The breakaway strength was tested according to ISO 10964. The strength test was performed after the specimen was heated for 30 minutes at the indicated temperatures.

Remaining strength @ 150 °C	%	71
Remaining strength @ 180 °C	%	54



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	12	11	11
Gasoline	23 °C	72	82	47
Brake Fluid	23 °C	44	52	47
Water/Glycol (50/50)	87 °C	144	168	161

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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