

Primer

SURFACE PREPARATION

TECHNICAL DATA SHEET

Revised January 2020



PRODUCT DESCRIPTION

Born2Bond™ Primer is used to make polyolefin and other low surface energy substrates suitable for bonding cyanoacrylate adhesives. The product also can serve as an addition to surface treatment (corona plasma, laser etching, etc.). It is only recommended for difficult-to-bond substrates, which include polyethylene, polypropylene, polytetrafluoroethylene (PTFE) and thermoplastic rubber materials and is not recommended when high peel strength is required.

KEY FEATURES

- Very low viscosity
- Very good wettability on low surface energy substrates
- Works as an accelerator on cyanoacrylate adhesive applications
- Enables adhesive to be applied within two hours without losing performance

DIRECTIONS FOR USE

1. Before applying Born2Bond Primer, ensure the surface is clean, dry and grease-free.
2. Born2Bond Primer can be applied at room temperature via brushing.
3. Avoid excess Born2Bond Primer on the surface.

4. After applying Born2Bond Primer, ensure the solvent evaporates completely and that the surface is dry before applying a Born2Bond adhesive to one of the surfaces. If using a polyolefin adhesive to bond the surfaces together, be sure to apply the primer on the polyolefin. The part can then be assembled in seconds.

5. Once assembled, ensure the substrates are clamped together until the adhesive has achieved fixture.

APPLICATIONS

Typical applications for this product are low surface energy bonding and indoor applications.

STORAGE/SHELF LIFE

Optimal storage: If stored in cool, dry and ventilated area, this product has a shelf life of 12 months from the packaging date.

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.

LIMITATIONS

Born2Bond Primer is not recommended in assemblies where high peel and tensile strength is required. 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.

PRODUCT CHARACTERISTICS

Technology	Primer – Cyanoacrylate
Appearance	Transparent liquid
Solvent	n-Heptane
Viscosity at 20°C (68°F)*	1.25 cp
Specific gravity (ASTM D1875: 23°C / 73.4°F)	0.67 g/cm ³
Drying time at 20 °C (68°F)	24 seconds

*based on Brookfield viscometer

EFFECT ON CURED PROPERTIES OF CYANOACRYLATE ADHESIVES

Products Bostik Instant LV and Born2Bond Ultra LV are based on ethyl and 2-methoxyethyl cyanoacrylates respectively. Other Born2Bond liquid products based on these cyanoacrylates will behave in a similar fashion to these examples.

TYPICAL PERFORMANCE OF CURED MATERIAL

Fixture time is the time at which an adhesive bond is capable of supporting a 1 kg load for 10 seconds. The fixture time will depend on the substrate. The table below shows the fixture time for different substrates using lap shears. Substrates are treated with Born2Bond Primer.

FIXTURE TIME

Fixture Time (0.1MPa)

Polyethylene and Bostik Instant LV	5 - 20 seconds
Polypropylene and Bostik Instant LV	5 - 20 seconds
Polytetrafluoroethylene and Bostik Instant LV	10 - 40 seconds
Polyethylene and Born2Bond Ultra LV	5 - 20 seconds
Polypropylene and Born2Bond Ultra LV	5 - 20 seconds
Polytetrafluoroethylene and Born2Bond Ultra LV	20 - 40 seconds

BONDING PERFORMANCE

Lap shear strength (ISO 4587) @ 23°C (73.4°F) (MPa)

@ 2mm/min after 24h Curing at RT

Polyethylene and Bostik Instant LV	3	+/- 2
Polypropylene and Bostik Instant LV	3	+/- 2
Polytetrafluoroethylene and Bostik Instant LV	2	+/- 1
Polyethylene and Born2Bond Ultra LV	2	+/- 1
Polypropylene and Born2Bond Ultra LV	2	+/- 1
Polytetrafluoroethylene and Born2Bond Ultra LV	2	+/- 1

CONVERSIONS

$$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$$

$$\text{kV/mm} \times 25.4 = \text{V/mil}$$

$$\text{mm} / 25.4 = \text{in}$$

$$\mu\text{m} / 25.4 = \text{mil}$$

$$\text{N} \times 0.225 = \text{lb}$$

$$\text{N/mm} \times 5.71 = \text{lb/in}$$

$$\text{N/mm}^2 \times 145 = \text{psi}$$

$$\text{MPa} \times 145 = \text{psi}$$

$$\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$$

$$\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$$

$$\text{mPa}\cdot\text{s} = \text{cP}$$

PRODUCT 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 contained 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.**

intertronics

adhesives, coatings, sealants & equipment
for your manufacturing and technology applications

t 01865 842842

e info@intertronics.co.uk

www.intertronics.co.uk