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, polytetrafluoroethelene (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.

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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 and Bostik Instant LV	3	+/- 2
Polypropylene and 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

(°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/mm^2 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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