B300 – Technical Data Sheet

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Description

B300 is a low to medium viscosity, fast curing, single component cyanoacrylate adhesive, which can be used for virtually any type of fastening job. **B300** is specifically formulated for difficult-to-bond substrates.

B300 is less dependent on surface moisture for cure speed than other standard cyanoacrylate grades. Better efficiency and quality, combined with cost saving, has made **B300** a suitable repair material.

When a thin layer of **B300** is applied between two surfaces it comes into contact with atmospheric moisture, a rapid polymerization occurs producing the ultimate bond.

Properties of Liquid State

Base	Ethyl Cyanoacrylate
Colour	Clear
Specific Gravity (20°C)	1.053~1.060
Refraction Index (n 20D)	1.439
Flash Point (°C)	>80°C
Shelf Life	12 months
Boiling Point (°C)	65/6mm Hg
Viscosity (cP)	100-200

Properties of Cured State

Colour	Clear
Specific Gravity (20°C)	1.1~1.3
Working Temperature (°C)	-55 °C - 80°C
Refractive Index (n 20D)	1.49
Dielectric Constant (at 10MHz)	3.5
Dielectric Loss (at 10MHz)	0.067

Note: **B300** is soluble in acetone, dimethyl formamide, nitromethame and dimethyl sulfoxided.

Directions for Use

1. Make sure the surfaces to be bonded are clean and dry (preferable to solvent-wipe plastics glass, and rubber, and to acid-treat metals).

2. Dispense a drop or drops to one surface only. Apply only enough to leave a thin film after compression.

3. Press parts together and hold firmly for a few seconds. Good contact is essential. In most cases, an adequate bond develops in less than one minute (see table *'Cure speed of **B300** for various materials'* for more information). Maximum strength is achieved in 24 to 48 hours.

4. Wipe off excess adhesive from the top of the container and recap **B300**. If left uncapped, may

deteriorate by contamination from moisture in the air.

5. Because **B300** polymerises on contact with moisture surfaces, sometimes whitening will occur on the surface of the container or the bonded materials. Should this happen, wipe surfaces well with de-bonder.

Cure speed of B300 for various materials

Materials bonded	**Time to achieve adequate bond (s)**
ABS to ABS	5
Wood to wood	50
ABS to stainless steel	50
NBR to stainless steel	50
NBR to NBR	2
Stainless steel to stainless steel	50
ABS to NBR	2
Wood to ABS	20

Bond strength of B300 for various materials

Tensile shear strength, cured for 24 hours at 20-25°C.

Materials bonded	**Tensile Shear Strength (kg/cm^2)**
Rigid PVC to Rigid PVC	40
ABS to ABS	50
Polycarbonate to polycarbonate	80
Polystyrene to polystyrene	30
Natural rubber to natural rubber	5
Neoprene to neoprene	5
NBR to NBR	5
ABS to SBR	5
SBR to SBR	5
Steel to steel	150
Stainless steel to stainless steel	150
Aluminum to aluminum	140
Copper to copper	130
Steel to rigid PVC	50
Stainless steel to neoprene	5

Precaution

1. Use with proper ventilation. Avoid contact with skin and eyes.

2. If contact with skin occurs, rinse with warm water or dissolve gradually with appropriate de-bonder. Do not try to remove forcibly.

3. If adhesive gets into eye, keep eye open and rinse thoroughly. Seek medical attention immediately.

4. Keep well out of reach of children.

5. Keep adhesive in a cool, dry place 20-25°C. For long term storage, refrigeration (5°C) is recommended.

Please consult the B300 Health & Safety Data Sheet for statutory regulation information.

Information relating to the products of Bondrite Adhesive Limited is based on tests carried out under laboratory conditions. If any of our products are not used in accordance with our instructions or are used under conditions which vary from our laboratory, they may not perform in accordance with any information provided and Bondrite shall not have any liability in this case. Bondrite will accordingly provide samples of our products, on request and free of charge, for customers to carry out their own tests as to suitability of our product for their purposes and as used in their intended environment.

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