
TECHNICAL DATA SHEET**CA PLUS Black Toughened Cyanoacrylates: B300, B1000, B4000 and B5000**

Product Description: The advanced performance series of CA PLUS Cyanoacrylates are a family of products that have been designed and manufactured to meet the demands of today's product assembly requirements. These adhesives are used in applications that require exceptionally fast cure speeds, difficult to bond substrates, and acidic surfaces. Wood, PVC surfaces that contain plasticizers and certain types of EPDM, etc. This new generation of cyanoacrylates create exceptional bond strengths with excellent aging and weathering characteristics.

<u>Physical Properties:</u>	B300	B1000	B4000	B5000
(Uncured Properties)	-----Modified Cyanoacrylate-----			
Base Compound	-----			
Appearance	Black	Black	Black	Black
Viscosity @ 20°C	300cps	1000cps	4000cps	5000cps
Flash Point (TCC)	-----200°F-----			
Specific Gravity	1.1	1.1	1.1	1.1
Soluble in	-----Nitromethane-----			

Cured Properties

Melting Point	-----340° F-----			
Service Temp.	-----65°F to 212°F-----			
Shear Strength	-----4000psi-----			
Fixture time	45 sec	45 sec	45 sec	45sec
Cure time	24 hours	24 hours	24 hours	24hours

Shear Strength

Natural Rubber	-----Rubber failed-----			
Nylon/Nylon	320psi	320psi	320psi	320psi
Steel/Steel	3200psi	3200psi	3200psi	3200psi
Aluminum/Aluminum	2500psi	2500psi	2500psi	2500psi

Preparation:

For best results and optimum adhesive performance, surfaces should be clean and free from contaminants. Contaminants can be removed by using suitable solvents. When using a cleaning solvent, first check for material compatibility particularly in the case of plastics. An easy method for removing contaminants is by using a clean cloth and wiping the surface with acetone or alcohol.

Application:

The advanced performance series of CA PLUS **Black Toughened** Cyanoacrylates should be applied in small amounts to one surface only. The parts should then be mated together under slight pressure. This causes the adhesive to spread out into a thin film and assures optimum adhesive performance. The pressure need only be applied for several seconds. This advanced performance series cures rapidly allowing for bonded parts to be handled within 10 to 60 seconds for most applications. Full cure is normally within 8 hours. In cases where CA PLUS Accelerator is used, fixturing will normally occur in less than 5 seconds with full cure in 2-4 hours.

Shelf Life:

All of the advanced performance series products have a minimum shelf life of six months when stored at 40°F. Shelf life at room temperature (72°F) is a minimum of three months. When stored in a refrigerator, allow the adhesive to gradually warm to room temperature prior to use. Avoid heat, direct sunlight and high moisture areas when storing. Avoid contaminating open containers

Handling Precautions:

All of the advanced series products are non-toxic and so do not constitute a health hazard. Normal precautions should be observed. Use in areas where there is adequate ventilation. **KEEP AWAY FROM CHILDREN.**

Accidental skin bonding may occur. Use warm, soapy water to separate skin or use CA PLUS Debonder. Gradually work skin free. Do not use excessive force to pull bonded area apart: this will only result in the tearing of skin and/or cause irritation which is unnecessary.

Should eye contact occur flush with water and see a physician. Do not force the bonded area apart. When the corneal surface and eyelid are bonded together treat with a suitable anti-irritant ointment and allow the eye to remain closed. Bond separation will occur naturally within 48 hours with no damage.

While the information set forth herein is believed to be accurate as of the date hereof, the Company makes no warranty or guarantee, express or implied and disclaims all liability arising out of the use of this information. As of October 2, 2003.