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TECHNICAL DATA SHEET

CA PLUS LOW ODOR / LOW BLOOM GEL CYANOACRYLATE

<u>Product Description:</u> This advanced performance product of Gel Cyanoacrylate has been designed and manufactured to meet the demands of today's product assembly requirements while at the same time reducing odor and blooming. Standard Cyanoacrylates are generally eye and nose irritants. CA PLUS Low Odor / Low Bloom Gel cyanoacrylate virtually eliminates the odors and fumes that cause irritation and the whitening effect around the bond. (Sometimes called blooming.)

Physical Properties:

(Uncured Properties)

Base Compound Alkoxy-ethyl Cyanoacrylate

Appearance Clear, Colorless Viscosity @ 68°F Thixotropic Gel

Flash Point (TCC) >175°F Density 1.10

Shelf Life Six Months, unopened

Soluble in Nitromethane

(Cured Properties)

Refractive Index 1.45

Solubility Nitromethane
Fixture Time: Wood to Wood 15 – 20 seconds

Nitrile to Nitrile <7 seconds
Neoprene to Neoprene <7 seconds
EPDM to EPDM <7 seconds
Steel to Steel 20 to 40 seconds
PVC to PVC 20 to 40 seconds

Polycarbonate to Polycarbonate 20 to 50 seconds

Full Cure 24 Hours Shear Strength: Grit Blasted Steel > 2000psi

Etched Aluminum > 1500psi

Nitrile Rubber > 500psi (Substrate failure)

Polycarbonate > 1800psi
Tensile Strength: Grit Blasted Steel > 2200psi

Nitrile Rubber > 700psi (Substrate failure) Neoprene Rubber > 700psi (Substrate failure)

Gap fill (Inches)

Temp. Range

.010" to .012"

-65°F to +180°F

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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 product of CA PLUS Low Odor / Low Bloom Gel Cyanoacrylate 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 product cures rapidly allowing for bonded parts to be handled within 7 to 50 seconds for most applications. Full cure is normally within 24 hours. In cases where CA PLUS Accelerator is used, fixturing will normally occur in less than 5 seconds with full cure in 8 hours.

Shelf Life:

The Low Odor / Low Bloom Gel Cyanoacrylate has a shelf life of six months when stored at 40°F. Shelf life at room temperature (72°F) is a minimum of 4 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:

Low Odor / Low Bloom Gel Cyanoacrylate is non-toxic and does not constitute a health hazard. Normal precautions should be observed. 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.