

PRODUCT SPECIFICATION

MXBON® B680

Cyanoacrylate Adhesive (Rubber Toughened)

Description:

MXBON® B680 is a black Ethyl Cyanoacrylate, with higher peel and shock resistance than other grades. **MXBON® B680** Has a longer setting time than regular Cyanoacrylate adhesive which allows enough time for users to put materials Together after application. It has been specially formulated to achieve the strongest possible bond between well-mated Non-porous surfaces, such as rubber, metals, plastics, etc. **MXBON® B680** is a one component, solvent free system and does not require the use of a catalyst, heat or clamps. When a thin layer of **MXBON® B680** applied between two surfaces comes into contact with atmospheric moisture, a rapid polymerisation occurs producing the ultimate bond.

Physical Properties:

Liquid State		Cured State	
Base	Ethyl Cyanoacrylate	Working Temp (°C)	-55°C - 125°C
Colour	Black	Coefficient of Thermal expansion (K ⁻¹)	80 x 10 ⁻⁶
Specific Gravity (20°)	1.05~1.060	Coefficient of Thermal Conductivity (W/m.K)	0.10
Refraction Index (nD ²⁰)	1.439	Glass Transition Temperature	150°C
Flash Point (°C)	>80°C	Electrical Properties	
Shelf Life	6 Months	Volume Resistivity (Ω.cm)	1 x 10 ¹⁶
Vapor Pressure (hPa)	<1	Surface Resistivity (Ω)	1 x 10 ¹⁶
Boiling Point (°C)	>200°C	Dielectric Constant @ 10kHz	2.75
Viscosity (cP)	100 - 500	Dielectric Dissipation Factor @ 10kHz	<0.02
		Dielectric Breakdown Strength (kV/mm)	25
Soluble in Acetone, Dimethyl formamide, Nitromethane, Dimethyl sulfoxide			

Bond Strength:

(TENSILE STRENGTH, CURED FOR 24 HOURS AT 20-25°)

Substrate	KG/CM ²	Substrate	KG/CM ²
Rigid PVC to Rigid PVC	40-200	SBR to SBR	50-140
ABS to ABS	60-200	Steel to Steel	190-300
Polycarbonate to Polycarbonate	50-200	Stainless Steel to Stainless Steel	160-280
Polystyrene to Polystyrene	40-145	Aluminum to Aluminum	130-225
NBR to NBR	50-140	Copper to Copper	150-190

Cure Speed:

Substrate	Seconds	Substrate	Seconds
ABS to ABS	15-50	NBR to NBR	5-30
Phenolics	20-60	Stainless steel to Stainless steel	60-100
ABS to NBR	15-30	Steel to Steel	80-120
Polycarbonate	30-60	Zinc Plated	50-150
Aluminum	10-30		

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Directions For Use:

1. Make sure the surfaces to be bonded are clean and dry (preferable to solvent-wipe plastics, glass, 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. An adequate bond develops in less than one minute. (Maximum strength is achieved in 24 to 48 hours).
4. Wipe off excess adhesive from the top of the container and recap **MXBON® B680** if left uncapped, may deteriorate by contamination from moisture in the air.
5. Because **MXBON® B680** 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 debonder.

Handling & Storage

Storage: Keep products in the unopened container in a cool dry location. The product is best when stored at 2 to 8°C. temperatures less than 2°C can adversely affect product properties. Do not freeze. Keep container tightly closed until ready for use.

Handling: Material removed from containers may be contaminated during use. Do not pour back any product to the original Container. Misuse of product will void all warranties.

Precaution

1. Use with proper ventilation. Avoid contact with skin and eyes.
2. If contact with skin occurs, rinse with warm water or dissolve with appropriate debonder. Do not try to remove forcibly.
3. If adhesive gets into your 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.

Disclaimer:

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