TDS

MXBON® C685

CYANOACRYLATE ADHESIVE (Peel & Impact Resistance)

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England No. 6585066

PRODUCT SPECIFICATION

MXBON® C685

Cyanoacrylate Adhesive (Peel & Impact Resistance)

Description:

MXBON® C685 is specially formulated for applications requiring high viscosity, impact and peel resistance. **MXBON® C685** develops strong bonds on most metals, plastics or rubbers. **MXBON® C685** 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® C685** applied between two surfaces comes into contact with atmospheric moisture, a rapid polymerisation occurs producing the ultimate bond.

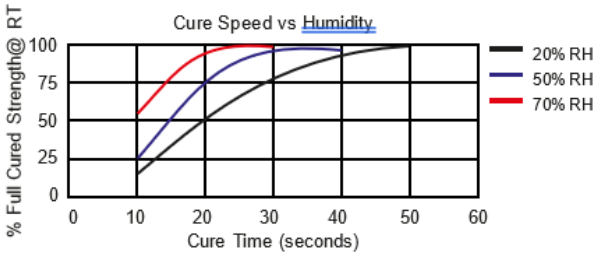
Typical Properties of Cured/Uncured Material:

Uncured State		Cured State Physical Properties	
Base	Ethyl Cyanoacrylate	Colour	Clear
Colour	Clear to Slightly Cloudy Gel	Coefficient of Thermal Expansion (K^{-1})	80 x 10^{-6}
Specific Gravity (25°)	1.05	Coefficient of Thermal Conductivity (W/m.K)	0.10
Refraction Index (nD^{20})	1.439	Working Temperature (°C)	-55°C - 125°C
Flash Point (°C)	See SDS	Cured State Electrical Properties	
Vapour Pressure (hPa)	<1	Volume Resistivity (Ω.cm)	1 x 10^{16}
Viscosity (cP) @ 25°C	3500-6000	Surface Resistivity (Ω)	1 x 10^{16}
Shelf Life	6 months	Dielectric Constant @ 10kHz	2.50
Storage Life Below 5°C	8-10 months	Dielectric Dissipation Factor @ 10kHz	<0.02
		Dielectric Breakdown Strength (kV/mm)	25

Curing Performance:

There are many factors that can influence the rate of cure. These include: the types of substrate used, the Condition of the surface to be bonded, the smoothness of the surface, the closeness of the surfaces and the atmospheric conditions.

SUBSTRATE	CURE SPEED SECONDS
Steel to Steel	20-50
Stainless Steel to Stainless Steel	60-120
Aluminum to Aluminum	10-30
Zinc Plated to Zinc Plated	30-190
ABS to ABS	25-70
ABS to NBR	3-5
NBR to NBR	5-10
Polycarbonate	5-10
Phenolics	30-70



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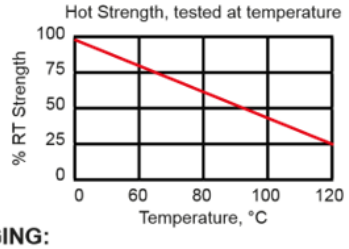
Bond Strength:

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

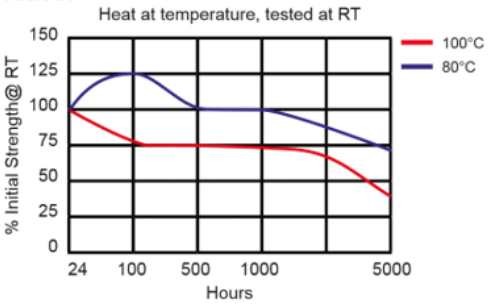
SUBSTRATE	KG/CM²
Steel to Steel	180-250
Stainless Steel to Stainless Steel	160-220
Aluminum to Aluminum	110-190
Copper to Copper	120-170
PVC to PVC	40-80
ABS to ABS	50-100
Polycarbonate to Polycarbonate	50-120
Polystyrene	30-110
NBR to NBR	50-100
SBR to SBR	50-110

TYPICAL ENVIRONMENTAL RESISTANCE

HOT STRENGTH:



HEAT AGING:



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® C685** if left uncapped, may deteriorate by contamination from moisture in the air.
5. Because **MXBON® C685** 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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