



**CARTELL CHEMICAL CO., LTD.**

No.18 Cheng Gong Street, Min-Shyong Industrial Park  
Chia-Yi Hsien, 621 Taiwan

TEL:886-5-220-3715 FAX:886-5-220-3720 E-MAIL [sales@mxbon.com](mailto:sales@mxbon.com)

## PRODUCT TECHNICAL DATA SHEET

### MXBON® 909

#### General Purpose – Gel

#### 1. PRODUCT DESCRIPTION

**MXBON® 909** is a non-running, non-sag, general industrial grade Gel Cyanoacrylate adhesive. It has been specially formulated for applications involving vertical structures and overhead assembly. The high viscosity and gel consistency together with a somewhat slower fixturing speed allows ample time for long open applications and applications requiring repositioning. **MXBON® 909** develops strong bonds on most metals, plastics, rubbers, leather wood etc. **MXBON® 909** 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® 909** applied between two surfaces comes into contact with atmospheric moisture, a rapid polymerization occurs producing the ultimate bond.

#### 2. TYPICAL PROPERTIES OF UNCURED MATERIAL

Base	Ethyl Cyanoacrylate
Color	Slightly cloudy, colorless to yellowish colored gel
Specific Gravity @ 25°C	1.05
Refractive Index (n D <sup>20</sup> )	1.439
Flash Point	See MSDS
Vapor Pressure (hPa)	< 1
Viscosity (cP) , 25°C	Gel

#### 3. 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, the atmospheric conditions etc.

##### Cure Speed / substrate

Steel to Steel	50 – 100 seconds
Stainless Steel	60 – 120 seconds
Aluminum	10 – 30 seconds
Zinc plated	40 – 90 seconds
ABS to ABS	10 – 60 seconds
ABS to NBR	15 – 25 seconds
ABS to Wood	15 – 25 seconds
NBR to NBR	5 – 20 seconds
Polycarbonate	40 – 80 seconds

## Cure Speed / Bond Gap

The rate of cure depends on the bond-gap. A smaller bond-gap results in faster cure speeds.

## 4. TYPICAL PROPERTIES OF CURED MATERIAL

<b>Physical Properties</b>	
Coefficient of Thermal Expansion (K <sup>-1</sup> )	80 x 10 <sup>-6</sup>
Coefficient of Thermal Conductivity (W/m.K)	0.10
Working Temperature	-50°C ~ 80 °C
<b>Electrical Properties</b>	
Volume Resistivity (Ω.cm)	1 x 10 <sup>16</sup>
Surface Resistivity (Ω)	1 x 10 <sup>16</sup>
Dielectric Constant @ 10 kHz	2.30
Dielectric Dissipation Factor @ 10 kHz	<0.02
Dielectric Breakdown Strength (kV/mm)	25

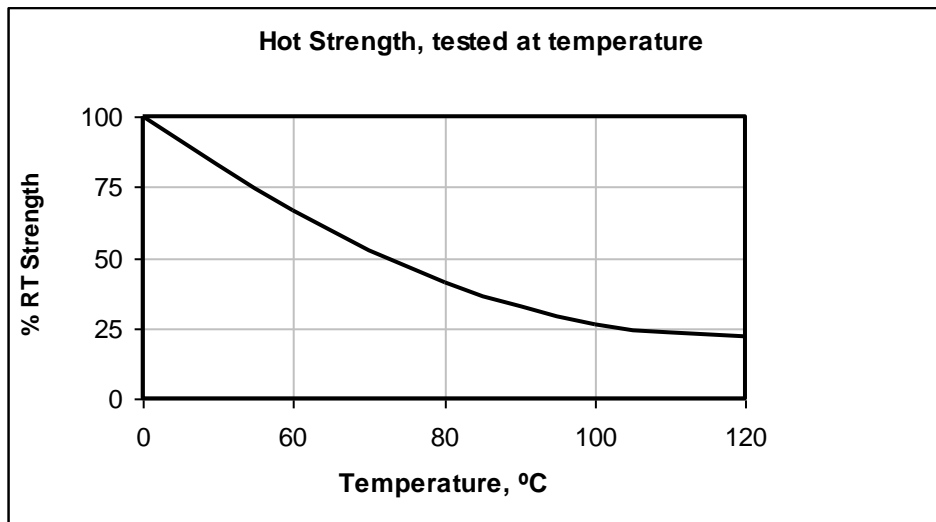
## 5. ADHESIVE PERFORMANCE

After 24 hours at 25°C.

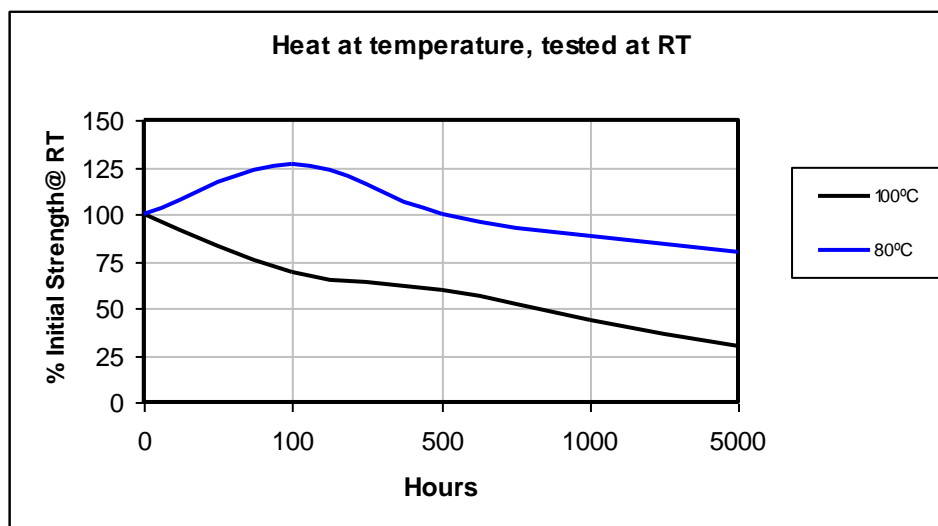
<b>Tensile Strength</b>	
Steel	180 – 250 Kg/ cm <sup>2</sup>
Stainless Steel	250 – 450 Kg/ cm <sup>2</sup>
Aluminum	110 – 190 Kg/ cm <sup>2</sup>
Copper	130 – 170 Kg/ cm <sup>2</sup>
ABS	50 – 150 Kg/ cm <sup>2</sup>
Polycarbonate	45 – 150 Kg/ cm <sup>2</sup>
Polystyrene	40 – 130 Kg/ cm <sup>2</sup>
NBR	50 – 110 Kg/ cm <sup>2</sup>
SBR	50 – 110 Kg/ cm <sup>2</sup>

### TYPICAL ENVIRONMENTAL RESISTANCE

#### Hot Strength:



## Heat Aging:



## 6. 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. 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® 909** if left uncapped, may deteriorate by contamination from moisture in the air.
5. Because **MXBON® 909** condenses by polymerization, sometimes whitening will occur on the surface of the container or the bonded materials. Should this happen, wipe surfaces well with acetone.

## 7. HANDLING AND STORAGE

**Storage:** Keep products in the unopened container in a cool and dry location. 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.

## 8. PRECAUTIONS

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 solvent such as acetone, or nitromethane. 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 (68-77°F). For long-term storage, refrigeration (2°C or 35°F) is recommended.

Disclaimer: The data contained herein are furnished for informational purposes only and are believed to be reliable. However, CARTELL CHEMICAL CO., LTD. does not assume responsibility for any results obtained by persons over whose methods CARTELL CHEMICAL CO., LTD. has no control. It is the user's responsibility to determine the suitability of Cartell's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Cartell's products. CARTELL CHEMICAL CO., LTD. specifically disclaims all warranties express or implied, including warranties of salability and suitability for a particular purpose arising from sale or use of Cartell's products. CARTELL CHEMICAL CO., LTD. further disclaims any liability for consequential or incremental damages of any kind including lost profits.

Revision Date: November 21, 2013

Revision: 0004