



# TECHNICAL DATA SHEET

## CA90

**ULTRA BOND** series cyanoacrylate adhesive are instant bonding, single component adhesive, that bond almost all close-fitting smooth surface in second. It requires no mixing, no heating, and no clamping. These adhesives contains no solvent, have low toxicity, mild odor and non-flammable.

### Characteristics

Fast Setting / Easy to Use / Strong Bonding / Single Component

### Grade

- CA1Q : Fastest setting velocity for wood work / plastic rubber / metal.
- CA45 : Medium setting velocity & viscosity (50cps) for general purpose.
- CA50 : Medium setting velocity & viscosity (50 cps) for plastic / rubber / metal.
- CA60 : Low whitening / low blooming and medium setting velocity type.
- CA90 : Low whitening / low blooming and slow setting velocity type.

### General Properties

#### Monomer:

Type	CA1Q	CA45	CA50	CA60	CA90
Main Component	Ethyl Cyanoacrylate				
Viscosity (25°C)	2-3	50	50	2-3	2-3
Specific Gravity (20°C)	1.05	1.05	1.05	1.05	1.05
Flash Point	80°C				
Shelf Life (Month)	6	6	6	6	6
Appearance	Colorless Transparent Liquid				
Temperature Range	-55% ~ 82°C				

#### Polymer:

Type	CA1Q	CA45	CA50	CA60	CA90
Soft Point (°C)	155 - 158 approx				
Refractive Index (20°C)	1.45 approx				
Volume Resistivity	8.8* 1E +12Ωcm at 20°C				
Dielectric Constant	3.34 at 1 MC				

\*\* All the information is provided on the basic in good faith, and is believed to be trustworthy but is for reference only. Adhesion is very complicated and the result of it is much dependent on the surface material, additives, releasing agents of the substrates and user's methods. UEA and its agents, dealers, distributors, directors and employees cannot accept any liability for the results whatsoever arising from the use of UEA's products due that the utilization of these products is simply out of UEA's control. The users are responsible for selecting the suitability of the products and methods of use.



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Solubility	Soluble in acetone, DMF
Appearance	Colorless transparent

Tensile Shear Strength kg/cm<sup>2</sup>

	<u>CA10</u>	<u>CA45</u>	<u>CA50</u>	<u>CA60</u>	<u>CA90</u>
Steel - Steel	190	200	190	200	200
Copper - Copper	150	170	150	170	170
Aluminum - Aluminum	100	110	100	110	110
PVC - PVC	*	*	*	*	*
ABS - ABS	*	*	*	*	*
PMMA - PMMA	*	*	*	*	*

\* Failure of base material

### Direction in Use

#### 1. Surface Treatment:

ULTRA BOND series demonstrates its full efficiency on thoroughly cleaned surfaces. Therefore, completely remove moisture, oil, rust, mold release agent and other contaminants from the surface is the essential factor for ensuring satisfactory bonding strength.

#### 2. Bonding Method:

Apply small quantity of ULTRA BOND series on the surface to be bonded, lap them together to achieve uniform and thin application. Then fix them securely at the prescribed position. The thinner the adhesive application, the stronger bonding strength be obtained.

### Cares in Handling

#### 1. For Use

- Eye Irritant, Bond Skin in Seconds  
 In case of eye contact, the eye should be copiously flush with water and medical aid sought immediately when skin contact occur, the adhesive should be removed by soaking in warm, soapy water or by treatment with solvents such as acetone or nail polish remover.
- Do not use rubber or cloth gloves. Rubber gloves will bond when brought in contact with the adhesive and porous cotton gloves will absorb the



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adhesive and bond the gloves to the skin.

- When using it in large quantity or over a long period, be careful to ensure adequate ventilation of your work place.
- ULTRA BOND series bonds with virtually all materials except for PP, PE, or Fluoro resin.

### 2. For Storage

- Keep away from reach of children.
- Keep away from direct sunlight.
- Store in cool (under 10°C) and dry place.