



TOTALBOAT TOTALBOND CA GLUE

- Fast cure with industrial strength bond strength for a wide variety of applications
- Great for dissimilar or tough-to-bond surfaces
- Available in Thin, Medium, and Thick viscosities to support different applications and substrate textures
- TotalBond Accelerator component increases the cure speed of TotalBond CA adhesives

TotalBoat TotalBond CA Glue is a line of premium, high-quality cyanoacrylate adhesives that provide fast-setting, permanent bonds between many different materials. TotalBond CA Glue comes in three different viscosities to cover any project needs.

COMPATIBLE SUBSTRATES: Wood, cardboard, ceramic, rubber, various plastics, metals, leather, and more

NOTE: Each viscosity is catered to different substrates. See the APPLICATION DATA chart on page 2.

CLEANUP: Acetone, nail polish remover — these solvents may permanently damage certain substrates

VISCOSITY OPTIONS AVAILABLE:

THIN: Fast cure formula, great for applications requiring penetration and flow.

MEDIUM: Fast cure, surface-insensitive formula is great for bonding rough, porous, or acidic substrates.

THICK: Extended working time, great for bonding rough or irregular surfaces.

PERSONAL SAFETY:

Always use proper Personal Protective Equipment when using any TotalBoat product. Refer to the specific TotalBoat TotalBond Safety Data Sheet for more info.

SURFACE PREPARATION

- Bond surfaces should be dry and completely free of any dust, dirt, grease, wax, oils, or wax.

- When possible, abrade surfaces that are to be bonded with 220- or 320-grit sandpaper. Remove any sanding residue prior to applying TotalBond.
- If any surface preparation solvents are used to clean the surface, they must be completely evaporated prior to applying TotalBond.

APPLICATION

NOTE: If the TotalBoat TotalBond Accelerator is being used, follow the APPLICATION WITH ACCELERATOR instructions below.

- Apply TotalBond CA glue over 50°F. Below 50°F the cure rates may be slowed dramatically.
- Have all tools, clamps, or glue-spreading tools handy because the glue will set very quickly.
- For small bond surfaces, apply a single drop of TotalBoat TotalBond to one of the prepared bond surfaces. Mate and align the bond surfaces as quickly as possible and apply pressure.
- For larger bond areas, quickly apply drops every ½" to 1" to one of the prepared bond surfaces. Mate and align the two bond surfaces quickly and apply pressure to the bond surface.
- Hold or clamp the bond surface tight for 15-45 seconds (based on the cure times in the APPLICATION DATA chart below)
- Full cure strength takes 24 hours.
- For applications where a thicker bond gap is present, the cure time may be extended.

APPLICATION WITH ACCELERATOR

ACCELERATING TOTALBOND CA GLUE AFTER IT WAS APPLIED (Preferred to ensure best bond):

- Apply TotalBond CA Glue to the bond surfaces or parts being bonded.
- Mate to the bond surfaces with a fair amount of pressure.
- Immediately apply Spray TotalBond Accelerator over the exposed CA glue joint until sufficiently cured.

SURFACE APPLICATION METHOD:

- Prior to applying TotalBond CA glue, a thin but even film of TotalBond Accelerator should be applied to one of the bond surfaces. Do not apply enough Accelerator to create dripping or sagging.
- Allow the solvent to evaporate for about 25 seconds.
- Apply TotalBond CA Glue as soon as the solvent has evaporated (within 45 seconds of applying the Accelerator)
- If this window of 45 seconds from applying the Accelerator has been missed, reapply the Accelerator.



TOTALBOAT TOTALBOND CA GLUE

APPLICATION DATA:

VISCOSITY SELECTED:	THIN	MEDIUM	THICK
Applications:	When added flow and penetration is desirable with a fast cure	Great for bonding acidic, rough, or porous surfaces with a fast cure	Great for rough or irregular surfaces, longer working time
Application Conditions:	Over 50°F (Application at lower temperatures yields a significantly slower cure rate)	Over 50°F (Application at lower temperatures yields a significantly slower cure rate)	Over 50°F (Application at lower temperatures yields a significantly slower cure rate)
Acceptable Substrates:	Acrylic, polycarbonate, polyimide, PVC, polyether ether ketone, PETG, polysulfone, wood, latex, steel, aluminum, zinc dichromate	ABS, acrylic, cardboard, balsa wood, rubbers, polycarbonate, other plastics, metals, leather	Acrylic, ABS, latex, polycarbonate, polyimide, PVC, polyether ether ketone, PETG, polysulfone, PET, rubber, metals
Components:	One (Accelerator is optional)	One (Accelerator is optional)	One (Accelerator is optional)
Resin Type:	Ethyl Cyanoacrylate	Surface Insensitive Ethyl Cyanoacrylate	Ethyl Cyanoacrylate
Cure Rate:	Fast	Fast	Medium (up to 15 seconds alignment time)
Viscosity:	2-5cP (25°C)	80-120cP (25°C)	1500cP (25°C)
Bonding Time (Varies by substrate):	STEEL: 10-20 seconds POLYCARBONATE: 20-40 seconds NEOPRENE: Less than 5 seconds ABS PLASTIC: 10-20 seconds PVC: 20-50 seconds PHENOLIC: 10-20 seconds NITRILE RUBBER: 5-7 seconds	PLASTICS: 2-5 seconds WOOD: 1-5 seconds METALS: 8-10 seconds RUBBERS: Less than 3 seconds LEATHER: 5-15 seconds CERAMICS: 12-18 seconds	STEEL: 25-35 seconds POLYCARBONATE: 15-50 seconds NEOPRENE: Less than 5 seconds ALUMINUM: 10-20 seconds ABS PLASTIC: 10-30 seconds PVC: 10-30 seconds PHENOLIC: 10-15 seconds NITRILE RUBBER: 5-7 seconds
Maximum Gap Filling:	0.05mm	0.2mm	0.45mm
Full Cure Time:	24 hours (at normal application temps)	24 hours (at normal application temps)	24 hours (at normal application temps)
Melting Point (Cured):	160-170°F	160-170°F	160-170°F

PHYSICAL DATA:

VISCOSITY SELECTED:	THIN	MEDIUM	THICK
Viscosity:	2-5cP (25°C)	80-120cP (25°C)	1500cP (25°C)
Color:	Clear	Clear	Clear
T_g (ASTM-E228):	120°C	122°C	125°C
Dielectric Strength (ASTM D149):	625 v/mil	625 v/mil	625 v/mil
Coefficient of Thermal Expansion (ASTM-D696):	90 x 10 ⁻⁶	90 x 10 ⁻⁶	90 x 10 ⁻⁶
Coefficient of Thermal Conductivity (ASTM-C177):	0.1 W.m ⁻¹ K ⁻¹	0.1 W.m ⁻¹ K ⁻¹	0.1 W.m ⁻¹ K ⁻¹
Shear Strength (ASTM D1002/DIN 53283):	GRIT BLASTED STEEL: 2030-3190 psi NEOPRENE RUBBER: 1450-2175 psi ETCHED ALUMINUM: 1450-2175 psi PVC: 435-1305 psi POLYCARBONATE: 725-1450 psi	ABS PLASTIC: >1450 psi GRIT BLASTED STEEL: >2900 psi ETCHED ALUMINUM: >2610 psi RUBBERS: >3190 psi WOOD: >3625 psi POLYCARBONATE: >1740 psi	ABS PLASTIC: 1160-2030 psi NEOPRENE RUBBER: 1450-2175 psi PVC: 870-1300 psi ACRYLIC: 1450-2175 psi POLYCARBONATE: 725-1450 psi
Tensile Shear Strength:	2175-3770 psi	2610-4060 psi	2175-3190 psi
Service Temperature Range:	-76°F to 176°F	-76°F to 176°F	-76°F to 176°F
Melting Point Temperature:	160-170°F	160-170°F	160-170°F
Military Spec:	No	MIL-A-46050 Type II Class II	MIL-A-46050C Type II Class III

ACCELERATOR DATA:

Components:	Accelerator (Solvent-based)
Applications:	Used with TotalBoat TotalBond CA glue to increase the cure rate of the adhesive
Application Method:	Spray
Color:	Clear, Amber
Viscosity:	1cP
Dry Time (@68°F):	25 seconds
On Part Life:	1 Minute