

W186 N11687 MORSE DRIVE GERMANTOWN, WI 53022  
262-502-6610 FAX 262-502-4743

**DESCRIPTION:**

Cynergy CA7102 is a low viscosity methyl cyanoacrylate adhesive. It sets extremely quickly, typically in several seconds on most substrates. It was formulated to bond a variety of metals with high strength. It is ideal for bonding metal to metal or metal to other substrates, such as, rubber, plastics, and wood. The product meets Military specification MLLA 46050 Type I Class II.

Common substrates

- |   |   |  |
|---|---|--|
| <span style="color: blue;">■</span> Aluminum        | <span style="color: blue;">■</span> Polycarbonate | <span style="color: blue;">■</span> Copper |
| <span style="color: blue;">■</span> Stainless Steel | <span style="color: blue;">■</span> Rubbers       | <span style="color: blue;">■</span> Wood   |

**Set Times:**

At standard indoor temperature and humidity, surface moisture on the substrates initiates the curing process. Handle strength is developed in a short time but curing continues for at least 24 hours before full chemical/solvent resistance is developed. The rate of cure will depend on substrate used.

<i>Substrate</i>	<i>Set Time (seconds)</i>	<i>Substrate</i>	<i>Set Time (seconds)</i>
Stainless / Stainless	30-60	Steel / Steel	10-30
Aluminum / Aluminum	40-60	Steel / PVC	15-20
Copper / Copper	10-20	PVC / PVC	3-10
SBR / SBR	10-15		

**Typical Lap Shear:**

<i>Substrate</i>	<i>Lap Shear (psi)</i>	<i>Substrate</i>	<i>Lap Shear (psi)</i>
Grit Blasted Steel	>2900	Etch Aluminum	>2900
Stainless Steel	>2900	Polycarbonate	>2000
Copper	>1885	ABS	>725

**PHYSICAL PROPERTIES:**

All properties given are at 25°C unless otherwise noted.

<b><u>PROPERTY:</u></b>	<b><u>VALUE:</u></b>	<b><u>TEST METHOD:</u></b>
Color	Clear	Visual
Viscosity	80 - 120 cps	Brookfield LVT
Nominal Gap fill	0.20 mm	

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<u>PROPERTY:</u>	<u>VALUE:</u>	<u>TEST METHOD:</u>
Specific Gravity	1.05	
Glass Transition Temp (by DSC)	120 °C	ASTM E228
Melting Point	160-170 °C	
Tensile Strength	1885 - 2900 psi *	
Thermal Conductivity	0.1 W/m <sup>2</sup> K	ASTM C177
Coefficient of Thermal Expansion	100 ppm/°C	ASTM D696
Dielectric Constant	2.3	
Dielectric Strength	635 v/mil	ASTM D149
Temperature Range **	-60 to 80°C	

**INSTRUCTIONS:**

1. Bring to room temperature prior to use if stored refrigerated. Surfaces should be clean and dry and free of grease or debris. A light abrasion is recommended if possible.
2. If using an accelerator, apply to one surface only. Apply a thin film of adhesive to the other side and assemble immediately. Do not disturb or re-align joint until parts are set.

**STORAGE:**

Shelf life is one year at room temperature (77°F / 25°C). Refrigerated storage at 40°F is recommended to maximize shelf life. When stored in a refrigerator, allow the adhesive to gradually warm to room temperature prior to use. Avoid heat, direct sunlight and high moisture areas when storing. Avoid contaminating open containers. Do not return unused adhesive to original container. DO NOT refrigerate open containers.