

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

**DESCRIPTION:**

Cynergy CA7013 is a high viscosity ethyl cyanoacrylate adhesive. It has a medium set time for applications that need more alignment time. It is specifically formulated for bonding plastic parts, but it can be used with a variety of substrates including metal and elastomeric compounds.

Common substrates

- |               |                 |             |
|---------------|-----------------|-------------|
| ■ Acrylic     | ■ Polycarbonate | ■ Polyimide |
| ■ PVC         | ■ PEEK          | ■ PETG      |
| ■ Polysulfone | ■ PET           | ■ Latex     |
| ■ ABS         | ■ Rubber        | ■ Metals    |

**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>
Plastics	15-30	Rubbers	< 5
Steel	15-35	Leather	5-15
Aluminum	10-20	Ceramics	12-18

**Typical Lap Shear:**

<i>Substrate</i>	<i>Lap Shear (psi)</i>	<i>Substrate</i>	<i>Lap Shear (psi)</i>
Grit Blasted Steel	> 3150	Etched Aluminum	> 2610
Rubbers	> 1700	Wood	> 3600
Polycarbonate	> 1160	ABS	> 1160

**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	
Viscosity	2,500 cps	
Nominal Gap fill	0.50 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	2610 - 4060 psi	
Thermal Conductivity	0.1 W/m <sup>2</sup> K	ASTM C177
Coefficient of Thermal Expansion	100 ppm/°C	ASTM D696
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 and 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.
3. When bonding "O" rings, cut a fresh surface onto each end of the rubber to gain the best possible strength.

**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.