





Features & Benefits

-  Longer cure allows accurate alignment
-  Ease of use – no mixing or heat cure
-  Bonds most materials
-  100% reactive, no solvents

Description

Chem-Set 797 is a cyanoacrylate adhesive with good impact strength when compared to a conventional cyanoacrylate. It bonds rapidly at room temperature and has very good gap filling capabilities. The product adheres to a variety of surfaces including steel, aluminum, galvanized steel, plastics and elastomers.

Physical Properties of Uncured Adhesive

Chemical composition	Ethyl cyanoacrylate
Appearance	Colourless
Viscosity @ 25°C	3,000 – 5,000 mPa.s (cP)
Density	1.1

Typical Curing Properties

Maximum gap fill	0.508 mm 0.020 in
Cure speed*	5 -10 seconds (Steel) 8 -12 seconds (Buna N Rubber)
Full strength	24 hours

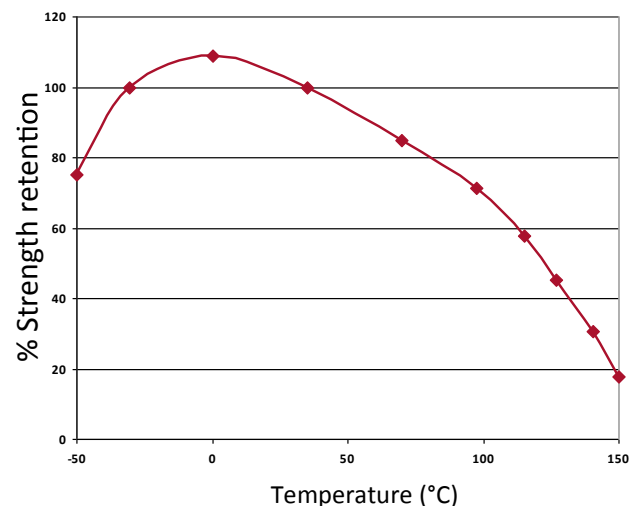
**Handling times can be affected by temperature, humidity and specific surfaces being bonded. Larger gaps or acidic surfaces will also reduce cure speed.*

Typical Performance of Cured Adhesive

Shear strength* ASTM D-1002	Steel 20-25 N/mm ² (2900-3625 psi)
Coefficient of thermal expansion	90 x 10 ⁻⁶ mm/mm/°C
Dielectric strength	10 Volts / mil
Coefficient of thermal conductivity	0.1 W/(m.K)

**Strength results will vary depending on the level of surface preparation and gap.*

Temperature Resistance



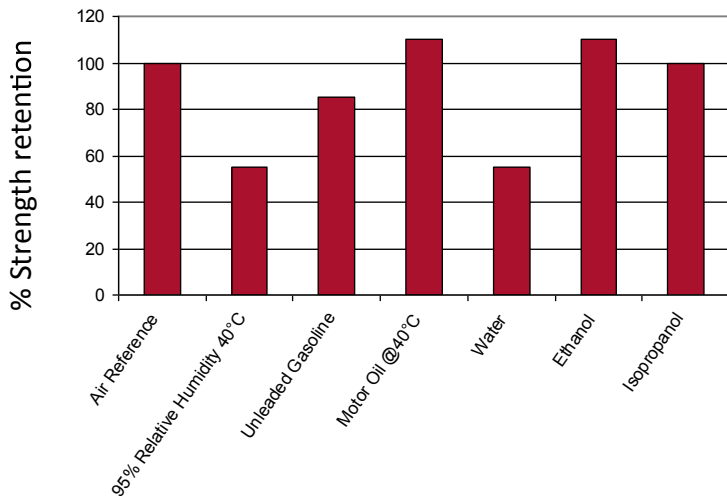
"Hot strength" shear strength tests performed on mild steel. 24hr cure at room temperature and conditioned to pull temperature for 30 minutes before testing.

797 can withstand higher temperatures for brief periods (such as for paint baking and wave soldering processes) providing the joint is not unduly stressed. The minimum temperature the cured adhesive can be exposed to is -55°C (-65°F) depending on the materials being bonded.

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Chemical Resistance



Specimens were immersed for 1000 hours at 22°C (unless otherwise stated)

Additional Information

This product is not recommended for use in contact with strong oxidizing materials and polar solvents although will withstand a solvent wash without any bond strength deterioration. Users are reminded that all materials, whether innocuous or not, should be handled in accordance with the principles of good industrial hygiene. Full information can be obtained from the Material Safety Data Sheet.

Contact Chemical Concepts

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Surface Preparation

Surfaces should be clean, dry and grease-free before applying the adhesive. Use a suitable solvent (such as acetone or isopropanol) for the degreasing of surfaces. Some metals such as aluminium, copper and its alloys will benefit from light abrasion with emery cloth (or similar), to remove the oxide layer.

Directions for Use

- 1) Apply the adhesive sparingly to one surface (usually 1 drop is sufficient).
- 2) Bring the components together quickly and correctly aligned.
- 3) Apply sufficient pressure to ensure the adhesive spreads into a thin film.
- 4) Do not disturb or re-align until curing is achieved, normally in a few seconds.
- 5) Any surplus adhesive can be removed with a suitable solvent.

Storage & Handling

Storage Temperature	2 to 7°C (35 to 45°F)
Shelf Life Stored in original unopened containers	6 months

Allow adhesive to reach room temperature before opening bottle to prevent condensation inside the bottle which can reduce shelf life.

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