

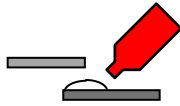


Guidelines for Curing Dymax Cyanoacrylates

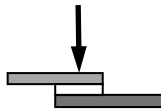
The speed, ease of use and cost efficiency of Dymax cyanoacrylate adhesives are easily achieved with proper application and curing procedures.

Bonding Surfaces Together

1. **Apply adhesive** drop or bead to one surface. Upon assembly, the adhesive should spread to fill the joint.



2. **Join surfaces** to ensure optimum surface-to-surface contact.



Optimum bond gap = 0.001 – 0.003"

512 Primer

Primer: Chemically modifies the bonding surface to improve adhesion.

Use: Apply fine mist or droplet to the substrate surface prior to adhesive placement.

520 and 521 Accelerators

Accelerator: Accelerates cure of a cyanoacrylate.

520 – Heptane base (evaporates faster)

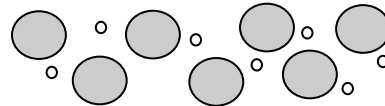
521 – Isopropyl alcohol base

Use: Either apply a fine mist or droplet to mating surface prior to adhesive placement *or* spray mist over assembled bond joint to cure slow edges or fillets.

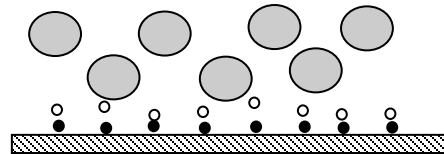
Note: Solvent must flash off completely before contacting cyanoacrylate resin.

Mechanism of Cyanoacrylate Cure

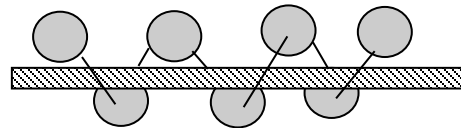
1. Cyanoacrylate systems are stabilized by an acidic stabilizer which inhibits polymerization of the adhesive molecules and keeps the product in a liquid state in the container.



2. When the adhesive is applied to the surface of most substrates, the stabilizer is neutralized by the alkalinity of the substrate or ionized water molecules present at the substrate surface.



3. Polymerization is initiated and the cyanoacrylate adhesive changes from a liquid to a structural polymer. Adhesion is achieved by the polymerization of the adhesive molecules after surface penetration around the molecules of the mating substrate.



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