



## Plastics Bonding System

**Description:** Loctite Plastics Bonding System is a two-part cyanoacrylate adhesive system that sets in seconds and develops tremendous strength with just one drop. The activator primes hard-to-bond surfaces such as polypropylene and polyethylene. No mixing required; simply prime and glue. Loctite Plastics Bonding System dries clear and sets without clamping. It is resistant to water, most chemicals and freezing temperatures.

**Available As:**

Item #	Size	Package
681925	Activator = 4 ml Adhesive = 2 g	Carded

**Features & Benefits:**

- Bonds Difficult to Bond Plastics such as Polyethylene, Polypropylene and PTFE/Teflon®
- Sets in Seconds
- No Mixing Required
- Dries Transparent

**Recommended For:**

Use for repairing figurines, costume jewelry, cameras, toys, metal car parts, wiper blades, rubber seals and O-rings. Bonds leather, cork, paper, cardboard, wood, chipboard, fabric, metal, ceramic, many rubbers and plastics such as Plexiglas®, polycarbonate, polystyrene, PVC, polyethylene, polypropylene and polytetrafluoroethylene (PTFE)/Teflon®.

**For Best Results:**

- Do not use polystyrene foam, foam rubber, pure bone china, glass or silicone rubber
- Bonded items should not be placed in oven or microwave
- Not suitable for bonding assemblies which will hold hot liquids
- Do not use on glazed surfaces
- Not suitable for exterior applications
- Not suitable for repairs needing high flexibility or for gap-filling applications



# TECHNICAL DATA SHEET

## Typical Uncured Physical Properties:

Color:	Clear and Colorless	
Appearance:	Liquid	
Adhesive Base:	Ethyl cyanoacrylate	
Activator Solvent:	Heptane	
Odor:	Solvent (use in well-ventilated area)	
Specific Gravity:	Adhesive: 1.05 Activator: 0.684	
Flash Point:	Adhesive: 176°F (80°C) to 200°F (93.4°C) Activator: 30.2°F (-1.00°C)	
VOC Content:	< 2 % by weight < 20 g/l	CARB SCAQMD rule 1168
Shelf Life:	From date of manufacture (unopened) : 30 months 18 months	Stored at 36-46°F Stored at 68°F
Lot Code Explanation:	#YDDDX	
Printed on crimped end on tube	# = Disregard Y= Last digit of year of manufacture DDD= Day of manufacture based on 365 days in a year X = Disregard  Example: 6061 = 61 <sup>st</sup> day of 2016 = March 2, 2016	

## Typical Application Properties:

Application Temperature:	Apply above 50°F (10°C)	
Fixture Time:	30 seconds*	
Handling Time:	Leave undisturbed for at least 10 minutes. For best results, allow full bond strength to develop overnight before handling.	
Cure Time:	12 to 24 hours*  *Times are dependent on temperature, humidity, porosity of surface bonded and amount of adhesive used	

## Typical Cured Performance Properties:

Color:	Clear and Colorless	
Cured Form:	Non-flammable, brittle solid	
Service Temperature:	Up to 180°F (82°C)	
Moisture Resistant:	Yes	
Tensile Shear Strength:	Varies from 290-2900 psi (2-20 N/mm <sup>2</sup> )	ISO 4587
Aluminum:	2248 psi (15.5 N/mm <sup>2</sup> )	12-24 hours cure, depending on the substrate
Chemical Resistance:	Motor oil, leaded petrol, ethanol, isopropanol and Freon® TA	

## Directions:

**Tools Typically Required:**  
Tissue paper

**Safety Precautions:**  
Use in a well-ventilated area. Protect work area. Wash hands after use.

**Preparation:**  
Surfaces to be bonded must be close fitting, clean, dry and free from oil, wax and paint. Protect work area. For best results, lightly roughen smooth surfaces. Pre-fit parts to be joined.

**Application:**  
To open the adhesive tube: Screw the cap and nozzle clockwise all the way down to tube shoulder, puncturing the tube. Unscrew the cap counter clockwise from the nozzle.



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To open the activator: Pull top off black base, exposing felt tip applicator. Note: The activator is only recommended for difficult to bond substrates such as polyethylene, polypropylene, polytetrafluoroethylene (PTFE) and thermoplastic rubber materials. Other substrates do not require activator.

Apply the surface activator to both surfaces (see note above). Wait 60 seconds for the activator to completely dry. Apply the adhesive sparingly to one side only using approximately one drop per square inch of surface. Press parts together immediately. Hold in place for 30 seconds or until bond sets. Do not reposition parts. Clean tip with tissue and replace the cap.

#### **Clean-up:**

After cleaning, wet any tissue used for wiping off glue with water and dispose of. When cleaning up larger quantities of uncured adhesive, apply water and allow to cure and then scrape up. Note this may result in damage to the surfaces. Cured adhesive may be cut away with caution using a sharp blade, removed with acetone or with boiling water. Note: Acetone may damage some plastics and is also highly flammable. Test before use and follow manufacturer's instructions.

#### **Storage & Disposal:**

Not damaged by freezing in the unopened container. Optimal shelf life is achieved when unopened container is stored from 36°F to 46°F (2°C to 8°C). After opening, it is not recommended that the product be stored cold or frozen. Once opened, the product is best stored tightly sealed in a dry location away from heat sources or sun exposure. Humidity and high temperatures may decrease shelf life. Use an approved hazardous waste facility for disposal.

#### **Label Precautions:**

**WARNING!** This kit contains the chemicals ethyl cyanoacrylate and heptane which may be harmful if misused.

**Bonder: WARNING! EYE, SKIN AND RESPIRATORY IRRITANT. BONDS SKIN IN SECONDS.** Contains Cyanoacrylate. May cause allergic skin reaction. Skin contact may cause burns. Avoid contact with skin and eyes. **FIRST AID:** In case of eye contact, flush with water for 15 minutes, call a physician. For skin contact, flush with water. For ingestion do not induce vomiting, call a physician.

**Activator: WARNING!** May be flammable. Keep away from heat and open flame. This activator contains a heptane soaked wad and marking tip but no free liquid. Vapor may be harmful. May irritate eyes and skin on contact. **FIRST AID:** In case of eye contact, flush with water for 15 minutes, call a physician. For skin contact, flush thoroughly with soap and water. If irritation persists, call a physician. **KEEP OUT OF THE REACH OF CHILDREN.**

**WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**Refer to Safety Data Sheet (SDS) for further information.**

#### **Disclaimer:**

The information and recommendations contained herein are based on our research and are believed to be accurate, but no warranty, express or implied, is made or should be inferred. Purchasers should test the products to determine acceptable quality and suitability for their own intended use. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.



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