

PERMABOND®

799LV

Cyanoacrylate



Ref #: 010104PB799LV

TYPICAL APPLICATIONS

Rubber Bonding
Model Assembly
Jewelry Assembly
Speaker Bonding
Fabric and Leather Bonding
Ceramics Bonding
Wood Bonding

FEATURES & BENEFITS

- ◆ Extremely fast setting
- ◆ Rapid cure through large gaps
- ◆ Surface insensitive – cures rapidly on most surfaces
- ◆ Easy to apply and dispense

GENERAL DESCRIPTION

PERMABOND 799LV is a moderate viscosity cyanoacrylate that combines fast cure with the ability to cure through a large gap.

The adhesive is surface insensitive and will rapidly bond wood and other substrates with acidic surfaces. Plastics, metals, ceramics and elastomers are also rapidly bonded. The fast cure minimizes the occurrence of frosting and fogging. This adhesive is particularly well-suited for use on porous substrates, since it fixtures before wicking into the surface pores.

Despite rapid cure, the product is very stable and will provide optimum performance for one year when refrigerated. It can be handled and dispensed with standard equipment.

The PERMABOND 799LV provides excellent performance in rapid assembly operations.

Non-Warranty: The information given and the recommendations made herein are based on our research and are believed to be accurate but no guarantee of their accuracy is made. In every case we urge and recommend that purchasers before using any product in full-scale production make their own tests to determine to their own satisfaction whether the product is of acceptable quality and is suitable for their particular purpose under their own operating conditions. THE PRODUCTS DISCLOSED HEREIN ARE SOLD WITHOUT ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED.

No representative of ours has any authority to waive or change the foregoing provisions but, subject to such provisions, our engineers are available to assist purchasers in adapting our products to their needs and to the circumstances prevailing in their business. Nothing contained herein shall be construed to imply the non-existence 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 this patent. We also expect purchasers to use our products in accordance with the guiding principles of the Chemical Manufacturers Association's Responsible Care® program.

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PHYSICAL PROPERTIES OF THE UNCURED ADHESIVE

<u>Properties:</u>	
Color	Clear, Slightly Yellow
Viscosity (cP @ 20°C)	4000-6000
Specific Gravity	1.05
Maximum Gap Filling, in	0.020
Shelf Life stored at 2°C-7°C (35°F-45°F), months	12
Flash Point, °C (°F)	83 (181)

SET TIME, SECONDS

Steel and Buna-N	5-10
Phenolic	5-10
Balsa	6-12

Full Cure: 24 hours

SET TIME, ACROSS 4 MIL GAP*

PERMABOND 799LV 8-12

*As per PBI Test Method 225

MILITARY SPECIFICATION

Type	II
Per Mil-A-46050-C*	Class 4

*A-A-3097 is intended to supersede Mil-A-46050C

PERFORMANCE PROPERTIES OF THE CURED ADHESIVE

Soluble In	Nitroethane, Methyl Ethyl Ketone, Acetone
Lap shear strength on steel at 25°C, psi (ASTM D1002, 24 hours)	1500
Operating temperature, °C (°F)	-60 (-80) to 82 (180)

SURFACE PREPARATION

The surface should be free of gross contamination such as dirt, dust, grease or oil. An alcohol wipe is suitable for cleaning most surfaces. Acetone is recommended for epoxies, polyesters, phenolics, melamine, urea formaldehyde, nylon and polyurethane. Optimum strength is obtained by abrading the surface followed by a solvent wipe to remove any loose particles.

APPLICATION & DISPENSING

PERMABOND's Equipment Group has a complete line of dispensing equipment for all types of assembly and automated applications. Customized equipment can be designed to meet the specific application requirements. Contact your local PERMABOND Sales Engineer for a complete systems approach to dispensing the PERMABOND 799LV.

STORAGE & HANDLING

Cyanoacrylate adhesives are subject to an aging process and have a limited shelf life. The shelf life is one year when stored in a refrigerator. It could be less when stored at ambient environment depending on conditions of temperature and humidity.

A note of caution: Before opening, the containers must be warmed to room temperature; otherwise water might condense into the bottle and cause hardening of the adhesive.

Avoid skin contact. Wear polyethylene gloves and safety glasses. Do not use rubber or cloth gloves. Cyanoacrylates can form strong bonds rapidly to skin. To break the bond, peel and flex the skin carefully. Immersion in soapy water aids in breaking the cyanoacrylate bond. Acetone or nail polish remover may also be used. If cyanoacrylate should come in contact with the eye, seek medical attention.

Cyanoacrylate vapors are lachrymatory and can irritate eyes and mucous membranes. Use these materials with proper ventilation.

VAPOR CONTROL RECOMMENDATIONS

1. Use adequate ventilation. Remove adhesive vapors with suitable exhaust ducting. Since cyanoacrylate vapors are heavier than air, place exhaust intake below work area. Activated charcoal filters using an acidic charcoal have been found effective in removing vapors from effluent air.
2. Avoid use of excess adhesive. Excess adhesive outside of the bond area will increase the level of vapors. Automatic dispensing equipment will prevent excess adhesive.
3. Assemble parts as quickly as possible. Long open times will increase level of vapors.

CLEAN UP OF SPILLED LIQUID

When large quantities of cyanoacrylate adhesives are accidentally spilled, the area should be flooded with water that will cause the liquid cyanoacrylate to cure. The cured material can then be scraped easily from the surface. NOTE: The liquid adhesive should not be wiped up with rags or tissue. The fabric will cause polymerization and large quantities of adhesive will generate heat on cure, causing smoke and strong irritating vapors. ALWAYS FLOOD WITH EXCESS WATER TO CLEAN UP SPILL CONDITIONS.

FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN.