

# **CYANOACRYLATE ADHESIVES**

### General Information: Products 7431, 7432, 7434, 7435 & Accelerator

**Bostik Cyanoacrylates** are single component, nearly instant-setting, room-temperature curing adhesives for closely fitting surfaces. They are compatible with a wide range of materials including many plastics, metals, glass and rubber. All products are clear in appearance.

Cyanoacrylate adhesives develop high tensile and shear strength. They're easy to handle and dispense from convenient squeeze-tube packaging. They are optimal for bonding small parts or assemblies and are adaptable to high speed assembly operations using automatic dispensing equipment.

PRODUCT BENEFITS	TYPICAL CURED PROPERTIES	
<ul> <li>Bonds almost instantly, eliminating the need for clamping,</li> </ul>	Base Resin	Ethyl Cyanoacrylate
fixturing or drying operations.	Temperature Service Range	-65°F to +200°F
<ul> <li>Provides high tensile and shear strength bonds.</li> </ul>	Melt Point	329°F
<ul> <li>Bonds wide variety of substrates including many plastics.</li> </ul>	Refractive Index (ND20)	1.49 (+/- 0.03)
<ul> <li>One-component adhesive – no measuring or mixing required.</li> </ul>	Dielectric Strength (kV/mm)	11.6
<ul> <li>Dispenses easily without "stringing" or waste.</li> </ul>	Dielectric Constant (@ 1kC)	5.4
<ul> <li>Good chemical resistance to oils, gasoline, freon</li> </ul>	COE (in/in/F)	.000126
<ul> <li>No hazardous vapors – safe to use</li> </ul>	Solubility	Nitromethane, Acetone,

#### STANDARD PACKAGING

Bostik® Cyanoacrylates are available in 1-oz. plastic squeeze bottles. Each bottle uses a specially designed extended tip which can allow for easy but accurate "pinpoint" dispensing of material in hard-to-reach areas and with minimal, if any, tip clogging. 1-Lb. bottles are available upon special order.

### APPLICATION INFORMATION ("FOR BEST RESULTS")

- Parts to be bonded with cyanoacrylates must be clean and free of surface contaminants, including dirt, dust, oils, plasticizers, silicones or release agents. Aluminum and other metals should be lightly abraded to remove oxides.
- Best results are obtained on close-fitting surfaces; the thinner the gap between parts, the better the bond strength.
- "Working time" can range from 5~50 seconds (without accelerator) depending upon substrate materials, surface finish, gap thickness between surfaces, and ambient humidity conditions. In all cases, **full cure** is typically achieved after 24 hours.
- Do not over-apply the adhesive, especially higher viscosity types. This may increase the bond or gap thickness and cause adhesive "squeeze out", possibly leading to handling or odor problems.
- In low humidity conditions, the use of an accelerator may be required to provide rapid bonding of parts or assemblies.
- The use of **activators** or **accelerators** may improve setting speed but may also degrade optimum bond performance. Users must verify acceptable performance.
- Cyanoacrylate adhesive may damage or mar some plastics. User pre-testing on bonds with sample or scrap materials is recommended.
- Always review and retain an up-to-date Material Safety Data Sheet ("MSDS") for any product being used or considered for use.



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PRODUCT	DESCRIPTION + APPLICATIONS	Cure Times* (material:secs) See Notes [1]	Gap Fill (inch)	Shear Strength (psi)	MIL-A-46050C (category)
7431	Low 2~4 cps viscosity, fast-setting product is ideal for bonding preassembled, tightly fitting or "mating" parts, lower porosity surfaces, various thermosetting plastics and metals. It is designed to set and adhere rapidly to inactive surfaces.	Steel:         5~10           Alum:         7~15           Plastics:         3~20           Rubber:         < 5           Pine:         2~4	.002	3000~3400	Type II, Class 1
7432	Low-to-medium 80~120 cps viscosity for bonding versatile range of low-to-medium porosity woods, papers, cardboard, leathers, fabrics; many metals, thermosetting plastics and elastomers.	Steel:         8~12           Alum:         8~15           Plastics:         3~20           Rubber:         < 6           Pine:         2~5	.005	3000~3400	Type II, Class 2
7434	Medium range 1500 cps viscosity + longer open-time allows for strong bonds to rough, semi-porous surfaces. Intended to set and bond rapidly to inactive surfaces such as wood, leather and fiberglass mat. Viscosity is ideal for medium gap-filling properties.	Steel:         20~40           Alum:         10~30           Plastics:         15~50           Rubber:         < 10	.008	3200~3600	Type II, Class 3
7435	Higher 2500 cps viscosity and longer open-time is intended for medium-to-large gap-filling properties and allows for strong bonds to rougher, more porous surfaces. Intended to set and bond rapidly to inactive surfaces such as wood, leather and fiberglass mat.	Steel:         20~40           Alum:         10~30           Plastics:         15~50           Rubber:         < 10	.008	3200~3600	Type II, Class 3
Accelerator	Heptane-acetone based primer/accelerator for preparing bond surfaces, enhancing bond strength or decreasing curing speeds. Low ODC blend formulated to be "plastic friendly" but users must test compatibility with substrates for best results.		n/a	n/a	

#### SHELF-LIFE INFORMATION:

The maximum shelf-life is 2 (two) years from date of manufacture ("DoM"). Bostik may, in its distribution literature or in other written or verbal communications, state the shelf-life as "one (1) year from time of shipment to the original purchaser" with the intention that this allows for a reasonable period of time that the product may be stocked in a distributor's inventory while still maintaining an acceptable shelf-life of at least 1 year.

Maximum shelf-life can be assured by keeping the product refrigerated when not in use.

#### IMPORTANT NOTICE

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