

ALTECO

Industrial Adhesives Catalog

Perfecting the Power to Connect with a Single Drop

Speed × Power
Cyanoacrylate Adhesives

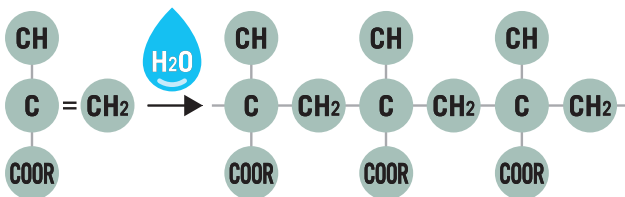


Speed & Power

Cyanoacrylate Adhesives



Continuing challenge
in creating environmentally
and human friendly adhesive.



When the cyanoacrylate monomer (cyanoacrylate adhesive) between bonded materials is spread into a thin film, it chemically reacts with trace moisture present on the surfaces, rapidly curing and developing strong adhesion.

- Instant Bonding Bond and fix in seconds. Saving work time.
Easy integration into the automated production lines.
- High Adhesion Strong adhesion to a wide range of materials
in industrial uses.
- One-Component Room Temperature Curing Simply apply the adhesive and assemble the parts.
Cures at room temperature without requiring special equipment.
- Solvent-Free Solvent free and low toxicity.
The workplace environmentally friendly.
- Electrical Insulation No electric conductivity. Excellent insulator.
- Excellent Finish Transparent.
Wide viscosity range - low viscosity to gel.
High quality finish tailored to applications
and materials.

Customization System

In addition to standard products, we offer various grades depending on materials and conditions. If there is no type that meets your required performance, please use our customization system. We will develop an original type based on bonding materials, viscosity, curing speed, strength, and usage amount. Colored grades for easy application verification are also available. Detailed consultation is required when placing an order. For more information, please contact us.

Curing Speed

Ultra-fast curing
to slow curing

Viscosity

1-10,000 mPa·s
Gel Type

Features

Material compatibility,
strength, blooming,
heat resistance,
and peel resistance



Cyanoacrylate Adhesives



For Metal Bonding, Chemical Resistance

Excellent adhesion to metal and plated surfaces.
Superior chemical resistance.

Category		1		
Product Name		M	MR	MX13
Curing Type		Standard	Standard	Standard
Appearance		Transparent	Transparent	Transparent
Viscosity (mPa·s)		3	15	500
Hardness (Shore D)		90	90	90
Set Time	Steel	15 s	15 s	20 s
	Aluminum	15 s	15 s	20 s
	ABS	10 s	10 s	10 s
	PMMA	10 s	10 s	10 s
	HPVC	10 s	10 s	20 s
	PC	10 s	10 s	20 s
	CR	5 s	5 s	5 s
Tensile Shear Strength (N/mm ²)	Steel	25	25	25
	Aluminum	13	16	16
	ABS	6*	6*	6*
	PMMA	6*	6*	6*
	HPVC	6*	6*	6*
	PC	9*	9*	9*
	CR	0.5*	0.5*	0.5*
Volume	20g	○	○	○
	50g	○	○	○
	100g	○	○	○
	500g	○	○	○
	1kg	○	○	○

For General Use

ALTECO standard cyanoacrylate adhesive.
Excellent adhesion to metal, rubber, and plastics.

Category		2		
Product Name		EE	E50	V2
Curing Type		Standard	Standard	Standard
Appearance		Transparent	Transparent	Transparent
Viscosity (mPa·s)		3	75	2000
Hardness (Shore D)		85	85	85
Set Time	Steel	15 s	20 s	30 s
	Aluminum	15 s	20 s	30 s
	ABS	10 s	10 s	15 s
	PMMA	10 s	10 s	20 s
	HPVC	10 s	20 s	25 s
	PC	10 s	20 s	30 s
	CR	5 s	5 s	15 s
Tensile Shear Strength (N/mm ²)	Steel	15	20	20
	Aluminum	8	12	12
	ABS	6*	6*	6*
	PMMA	6*	6*	6*
	HPVC	6*	6*	6*
	PC	9*	9*	9*
	CR	0.5*	0.5*	0.5*
Volume	2g×6	○		
	20g	○	○	○
	50g	○	○	○
	100g	○	○	○
	500g	○	○	○
	1kg	○	○	○

Ultra-Fast Curing

Fast curing and excellent adhesion to hard-to-bond materials.

Category		2						
Product Name		EZ3	EZ20	EZ100	EZ300	EZ500	EZ800	EZ1500
Curing Type		Ultra-Fast	Ultra-Fast	Ultra-Fast	Ultra-Fast	Ultra-Fast	Ultra-Fast	Ultra-Fast
Appearance		Transparent	Transparent	Transparent	Transparent	Transparent	Transparent	Transparent
Viscosity (mPa·s)		3	20	100	300	500	800	1500
Hardness (Shore D)		85	85	85	85	85	85	85
Set Time	Steel	2 s	2 s	2 s	3 s	3 s	3 s	3 s
	Aluminum	2 s	2 s	2 s	3 s	3 s	3 s	3 s
	ABS	2 s	2 s	2 s	3 s	3 s	3 s	3 s
	PMMA	2 s	2 s	2 s	3 s	3 s	3 s	3 s
	HPVC	3 s	3 s	3 s	5 s	5 s	5 s	5 s
	PC	2 s	2 s	2 s	3 s	3 s	3 s	3 s
	CR	2 s	2 s	2 s	3 s	3 s	3 s	3 s
	EPDM	2 s	2 s	2 s	3 s	3 s	3 s	3 s
Tensile Shear Strength (N/mm ²)	Wood (Birch)	30 s	30 s	20 s	20 s	20 s	30 s	30 s
	Steel	15	15	20	20	20	20	20
	Aluminum	8	8	12	12	12	12	12
	ABS	6*	6*	6*	6*	6*	6*	6*
	PMMA	6*	6*	6*	6*	6*	6*	6*
	HPVC	6*	6*	6*	6*	6*	6*	6*
	PC	9*	9*	9*	9*	9*	9*	9*
	CR	0.5*	0.5*	0.5*	0.5*	0.5*	0.5*	0.5*
Volume	EPDM	0.5*	0.5*	0.5*	0.5*	0.5*	0.5*	0.5*
	Wood (Birch)	8	8	10*	10*	10*	10*	10*
	20g	○	○	○	○	○	○	○
	50g	○	○	○	○	○	○	○
	100g	○	○	○	○	○	○	○
	500g							

We take every precaution to ensure that our product stock is well-managed.
However, we recommend confirming availability in advance, especially if your order is time-sensitive.

Cyanoacrylate Adhesives



For Hard-to-Bond Materials

Excellent adhesion to traditionally hard-to-bond materials such as EPDM and soft PVC.

Category		2			
Product Name		D	Z125	88	Z114
Curing Type		Fast	Ultra-Fast	Fast	Ultra-Fast
Appearance		Transparent	Transparent	Transparent	Transparent
Viscosity (mPa·s)		3	3	3	3
Hardness (Shore D)		85	85	85	85
Set Time	Steel	5s	3s	5s	2s
	Aluminum	5s	3s	5s	2s
	ABS	3s	3s	3s	2s
	PMMA	3s	3s	3s	2s
	HPVC	5s	5s	5s	3s
	PC	3s	3s	3s	2s
	CR	3s	3s	3s	2s
	EPDM	3s	3s	3s	2s
	POM	—	—	15s	—
Tensile Shear Strength (N/mm ²)	Steel	15	15	15	15
	Aluminum	8	8	8	8
	ABS	6*	6*	6*	6*
	PMMA	6*	6*	6*	6*
	HPVC	6*	6*	6*	6*
	PC	9*	9*	9*	9*
	CR	0.5*	0.5*	0.5*	0.5*
	EPDM	0.5*	0.5*	0.5*	0.5*
	POM	—	—	6*	—
Volume	2g×6	○		○	
	20g	○	○	○	○
	50g	○	○		○
	100g	○	○	○	○
	500g	○	○	○	○
	1kg	○	○	○	○

* Material failure

In accordance with JIS K6861 (1995), Testing methods for cyanoacrylate adhesives.

In accordance with JIS K6852 (1994),

Test method for compressive shear strength of adhesives.



Factors Affecting Set Time

Set time (bonding time) may vary depending on the materials being bonded and the surrounding environmental conditions.

Set Time	Slow ↔ Fast
Surface Conditions	Acidic ↔ Alkaline
Temperature	Low ↔ High
Humidity	Low ↔ High

Bonding Procedure

For Safe and Reliable Bonding



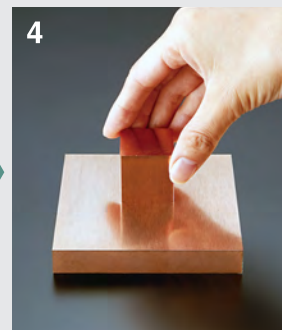
1
Remove dust, moisture, rust, and oil from the bonding surfaces.



2
Hold the cap upward and turn counterclockwise.
* Do not squeeze the container. The liquid may spurt out. Keep the nozzle away from your face and body.



3
Apply a small quantity to one side of the bonding area. Avoid excess application. The excessive adhesive may delay set time and cause blooming.



4
Do not spread the adhesive with your fingers or other tools. Simply press the bonding surfaces together to spread the adhesive evenly, then lightly hold the parts in place.
The bond will reach near-ultimate strength within 1 to 3 hours after application.

Cyanoacrylate Adhesives



High-Strength, Impact Resistance

Excellent metal adhesion and impact resistance.

Category		2		
Product Name		CN2	CN4	CN6
Curing Type		Standard	Standard	Standard
Appearance		Transparent	Transparent	Transparent
Viscosity (mPa·s)		3	75	1000
Hardness (Shore D)		85	85	85
Set Time	Steel	15s	25s	30s
	Aluminum	15s	25s	30s
	ABS	10s	10s	15s
	PMMA	15s	15s	20s
	HPVC	10s	20s	25s
	PC	10s	20s	30s
	CR	5s	10s	10s
Tensile Shear Strength (N/mm ²)	Steel	25	25	25
	Aluminum	13	13	13
	ABS	6*	6*	6*
	PMMA	6*	6*	6*
	HPVC	6*	6*	6*
	PC	9*	9*	9*
	CR	0.5*	0.5*	0.5*
Volume	2g×6	○	○	
	20g			
	50g	○	○	○
	100g	○	○	○
	500g	○	○	
	1kg	○	○	○



Peel Resistance

Excellent peel resistance.

Category		2	
Product Name		Z200M ■	Z200H ■
Curing Type		Slow	Slow
Appearance		Transparent	Transparent
Viscosity (mPa·s)		300	3000
Hardness (Shore D)		70	70
Set Time	Steel	30s	60s
	Aluminum	30s	60s
	ABS	20s	40s
	PMMA	30s	60s
	HPVC	30s	60s
	PC	30s	40s
	CR	15s	20s
Tensile Shear Strength (N/mm ²)	Steel	25	25
	Aluminum	13	13
	ABS	6*	6*
	PMMA	6*	6*
	HPVC	6*	6*
	PC	9*	9*
	CR	0.5*	0.5*
Volume	20g	○	○
	50g	○	○
	100g	○	
	500g	○	○
	1kg	○	

Low-Strength

Low-strength cyanoacrylate adhesive for thread locking and temporary fixing.

Category		2
Product Name		Z135 ■
Curing Type		Slow
Appearance		Blue Transparent
Viscosity (mPa·s)		20
Hardness (Shore D)		20
Set Time	Steel	20s
	Aluminum	20s
	ABS	20s
	PMMA	100s
	HPVC	50s
	PC	30s
	CR	5s
Tensile Shear Strength (N/mm ²)	Steel	5
	Aluminum	3
	ABS	6*
	PMMA	6*
	HPVC	3
	PC	9*
	CR	0.5*
Volume	20g	○
	50g	○
	100g	
	500g	
	1kg	

* Material failure

■ Made to order

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Cyanoacrylate Adhesives



Heat Resistance

No adhesion loss at 120°C over time, unlike standard cyanoacrylate adhesives.

High Heat Resistance

Offers continuous heat resistance at 120°C. Outperforms standard heat-resistant cyanoacrylate adhesives.

Water Resistance

No adhesion loss of bonded plastics (ABS) and rubber (CR) after water immersion for 3 months.

Impact Resistance

Approximately 10 times greater impact resistance than standard cyanoacrylate adhesives (in-house testing).

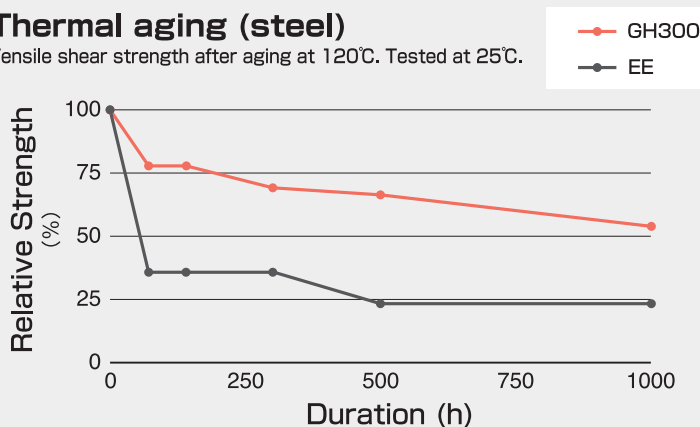
Performance Comparison

Product Name	GH300	EE
Tensile Shear Strength (N/mm ²)	25	15
Tensile Shear Strength (N/mm ²) at 120°C	18	3
T Peel (N/25mm)	65	20
Izod Impact Strength (mJ/mm ²)	20	2

EE: ALTECO standard product

Thermal aging (steel)

Tensile shear strength after aging at 120°C. Tested at 25°C.



Category		2
Product Name		GH300 
Curing Type		Standard
Appearance		Pale Yellow Transparent
Viscosity (mPa·s)		300
Hardness (Shore D)		70
Set Time	Steel	30 s
	Aluminum	30 s
	ABS	20 s
	PMMA	30 s
	CR	15 s
	NBR	15 s
Tensile Shear Strength (N/mm²)	Steel	25
	Aluminum	12
	ABS	6*
	PMMA	6*
	CR	0.5*
	NBR	0.5*
Volume	20g	
	50g	
	100g	
	500g	
	1kg	

Flexibility

Provides excellent flexibility and adhesion to rubber and plastics.

Category		4		
Product Name		T10 	T100 	T600 
Curing Type		Slow	Slow	Slow
Appearance		Transparent	Transparent	Transparent
Viscosity (mPa·s)		10	100	600
Hardness (Shore D)		40	40	40
Set Time	Steel	40 s	60 s	70 s
	Aluminum	40 s	60 s	70 s
	ABS	40 s	60 s	60 s
	PMMA	180 s	210 s	240 s
	HPVC	150 s	180 s	210 s
	PC	150 s	180 s	210 s
	CR	5 s	10 s	10 s
Tensile Shear Strength (N/mm²)	Steel	10	10	10
	Aluminum	8	8	8
	ABS	6*	6*	6*
	PMMA	3	3	3
	HPVC	3	3	3
	PC	3	3	3
	CR	0.5*	0.5*	0.5*
Volume	20g	○	○	○
	50g	○	○	○
	100g			
	500g			
	1kg			

Flexibility, Moisture- and Heat Resistance

Provides excellent flexibility, moisture resistance, and heat resistance. Excellent adhesion to rubber and plastics.

Category		2		
Product Name		Z180-A 	Z180-1 	Z180-2 
Curing Type		Standard	Standard	Standard
Appearance		Transparent	Transparent	Transparent
Viscosity (mPa·s)		4	4	300
Hardness (Shore D)		70	70	70
Set Time	Steel	10 s	20 s	20 s
	Aluminum	10 s	20 s	20 s
	ABS	10 s	20 s	20 s
	PMMA	15 s	40 s	40 s
	HPVC	15 s	40 s	40 s
	PC	15 s	40 s	40 s
	CR	5 s	5 s	5 s
Tensile Shear Strength (N/mm²)	Steel	20	20	25
	Aluminum	12	12	12
	ABS	6*	6*	6*
	PMMA	6*	6*	6*
	HPVC	6*	6*	6*
	PC	9*	9*	9*
	CR	0.5*	0.5*	0.5*
Volume	20g	○	○	○
	50g	○	○	○
	100g			
	500g			
	1kg			

* Material failure

■ Made to order

Cyanoacrylate Adhesives



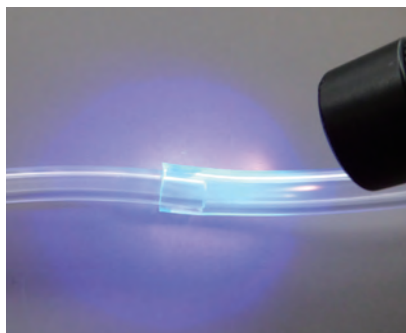
Dual-Cure(Moisture + UV)

In addition to curing through the mechanism of a cyanoacrylate adhesive, it can also be cured by exposure to UV or visible light.

Category		2				
Product Name		HK3X	HK100X	HK500X	HKV10X	HKV20
Appearance		Pale Green Transparent	Pale Green Transparent	Pale Green Transparent	Pale Green Transparent	Pale Green Transparent
Viscosity (mPa·s)		3	100	500	1000	2000
Hardness (Shore D)		85	85	85	85	85
Light Curing Time 100mW/cm ² 365nm	Exposure Time	1s	1s	1s	1s	2s
Set Time without UV	Steel	10s	30s	30s	45s	50s
	Aluminum	10s	30s	30s	40s	45s
	ABS	8s	15s	15s	17s	20s
	PC	8s	15s	15s	15s	20s
Tensile Shear Strength without UV (N/mm ²)	Steel	15	15	15	15	15
	Aluminum	8	8	8	8	8
	ABS	6*	6*	6*	6*	6*
	PC	6	6	6	6	6
	Silicone Rubber (Used with primer)	0.5*	0.5*	0.5*	0.5*	0.5*
Volume	50g	○	○	○	○	○
	500g	○	○	○	○	○
	1kg	○	○	○	○	○

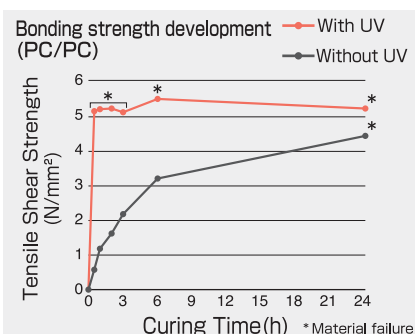
Moisture + UV Curing

Standard use as cyanoacrylate adhesives. Shadowed areas cure through moisture-curing chemistry. Light exposure accelerates curing. Cures gaps up to approximately 10 mm.



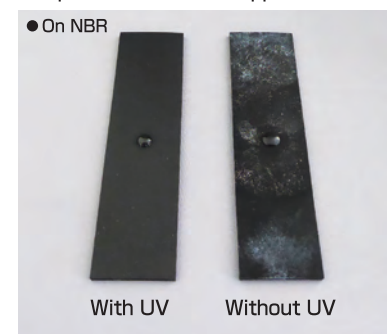
Shortened Process

Adhesion strength develops immediately after light exposure, reducing curing time.



Reduced Blooming

Rapid UV curing prevents the blooming phenomenon specific to cyanoacrylate adhesives and preserves a clean appearance.

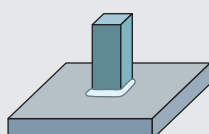


Blooming

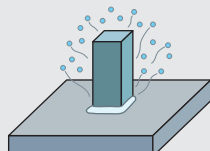
A phenomenon in which adhesive vapors form a white powder around the bonding area.

How to prevent

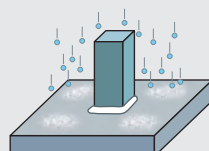
- Remove dust, moisture, oil on the bonding surfaces and around the bonding area.
- Reduce the relative humidity in the working environment.
- Prevent adhesive overflow. Apply only the minimum required amount.
- Do not immediately enclose the bonded items in a confined space, such as by overlapping or packaging them.
- Wear PE gloves.
- Prevent the buildup of adhesive fumes by directing air or warm air over the area.
- Use together with a spray primer or an accelerator such as PR150.
- Use HK series (Dual-Cure), Z26, Z27, or Z28S (low odor, low bloom), or the Z84 series (no odor, no bloom).



Excess adhesive and uncured areas may result from improper application or gaps in the bonding surfaces.



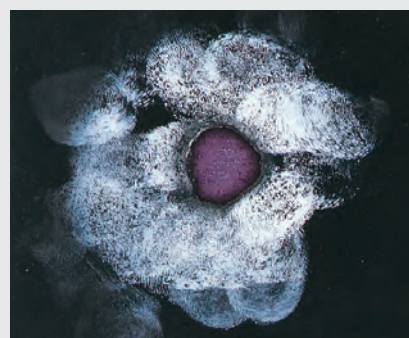
Adhesive begins to volatilize.



The adhesive reacts with atmospheric moisture and forms a powder that deposits after curing.

If Blooming Occurs

- Wipe thoroughly with dry cloth.
- Wipe off using acetone, alcohol, or a similar solvent. Confirm if the solvent affects the substrate before wiping.



Cyanoacrylate Adhesives



Low Odor, Low Bloom

Reduced cyanoacrylate-specific odor.
Low bloom after application.

Category		3		
Product Name		Z28S	Z27 ■	Z26
Curing Type		Fast	Standard	Standard
Appearance		Transparent	Transparent	Transparent
Viscosity (mPa·s)		3	70	150
Hardness (Shore D)		70	70	70
Set Time	Steel	5 s	10 s	15 s
	Aluminum	5 s	15 s	15 s
	ABS	5 s	10 s	15 s
	PMMA	15 s	20 s	20 s
	HPVC	5 s	10 s	25 s
	PC	10 s	20 s	25 s
	CR	3 s	5 s	5 s
	NBR	3 s	10 s	15 s
Tensile Shear Strength (N/mm ²)	Steel	15	20	20
	Aluminum	8	12	12
	ABS	6*	6*	6*
	PMMA	4	4	4
	HPVC	3	3	3
	PC	9*	9*	9*
	CR	0.5*	0.5*	0.5*
	NBR	0.5*	0.5*	0.5*
Volume	20g	○	○	○
	50g	○	○	○
	100g	○	○	○
	500g	○	○	○
	1kg			○

No Odor, No Bloom

Virtually odorless.
Minimal blooming after application.

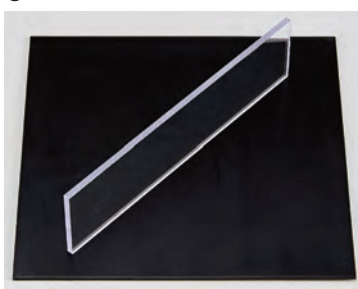
Category		4		
Product Name		Z84	Z84X	Z84V
Curing Type		Standard	Standard	Standard
Appearance		Transparent	Transparent	Transparent
Viscosity (mPa·s)		5	60	1000
Hardness (Shore D)		60	60	60
Set Time	Steel	15 s	20 s	30 s
	Aluminum	15 s	20 s	30 s
	ABS	15 s	30 s	40 s
	PMMA	90 s	100 s	110 s
	HPVC	15 s	40 s	50 s
	PC	30 s	60 s	70 s
	CR	3 s	5 s	10 s
	NBR	3 s	5 s	10 s
Tensile Shear Strength (N/mm ²)	Steel	15	20	20
	Aluminum	8	12	12
	ABS	6*	6*	6*
	PMMA	4	4	4
	HPVC	3	3	3
	PC	9*	9*	9*
	CR	0.5*	0.5*	0.5*
	NBR	0.5*	0.5*	0.5*
Volume	20g	○	○	○
	50g	○	○	○
	100g	○	○	○
	500g	○	○	○
	1kg	○	○	○

No Odor, No Bloom, High Strength

Virtually odorless.
Minimal blooming after application.
High adhesion, peel strength, and impact resistance.

Category		4
Product Name		Z84TF ■
Curing Type		Standard
Appearance		Transparent
Viscosity (mPa·s)		3000
Hardness (Shore D)		60
Set Time	Steel	70 s
	Aluminum	70 s
	ABS	40 s
	PMMA	340 s
	HPVC	300 s
	PC	340 s
	CR	30 s
	NBR	30 s
Tensile Shear Strength (N/mm ²)	Steel	20
	Aluminum	12
	ABS	6*
	PMMA	4
	HPVC	3
	PC	9*
	CR	0.5*
	NBR	0.5*
Volume	20g	○
	50g	○
	100g	
	500g	
	1kg	○

● Z84 series

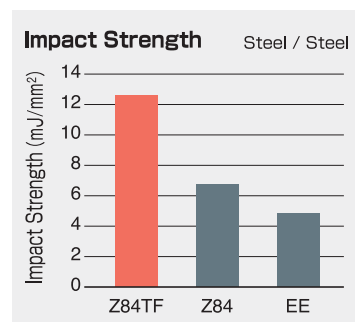
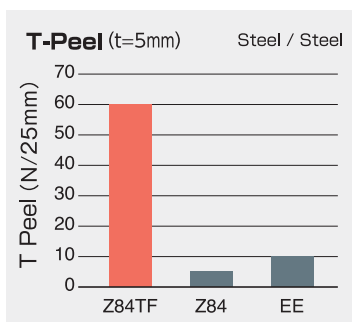


● Standard Cyanoacrylate Adhesives



■ High Adhesion

The product excels in peel strength and impact resistance compared to other non-blooming and standard cyanoacrylate adhesives.



* Material failure
■ Made to order

We take every precaution to ensure that our product stock is well-managed. However, we recommend confirming availability in advance, especially if your order is time-sensitive.

Cyanoacrylate Adhesives



For Wood and Porous Materials

Fast curing. Excellent adhesion to wood and porous materials.

Ideal for Wood and Porous Materials

● Comparison - Absorption to Wood



Category		2				
Product Name		W1	W200X	W500X	W1000X	W2
Curing Type		Fast	Fast	Fast	Fast	Fast
Appearance		Transparent	Transparent	Transparent	Transparent	Transparent
Viscosity (mPa·s)		150	150	500	1000	1700
Hardness (Shore D)		85	85	85	85	85
Set Time	Steel	10 s	5 s	15 s	15 s	20 s
	Aluminum	15 s	10 s	15 s	15 s	25 s
	ABS	10 s	5 s	10 s	10 s	10 s
	PMMA	10 s	5 s	10 s	15 s	15 s
	HPVC	20 s	10 s	20 s	20 s	20 s
	PC	20 s	10 s	20 s	20 s	25 s
	CR	5 s	3 s	5 s	5 s	10 s
	Wood (Birch)	40 s	20 s	40 s	40 s	40 s
Tensile Shear Strength (N/mm ²)	Steel	20	20	20	20	20
	Aluminum	12	12	12	12	12
	ABS	6*	6*	6*	6*	6*
	PMMA	6*	6*	6*	6*	6*
	HPVC	6*	6*	6*	6*	6*
	PC	9*	9*	9*	9*	9*
	CR	0.5*	0.5*	0.5*	0.5*	0.5*
	Wood (Birch)	10*	10*	10*	10*	10*
Volume	20g	○	○	○	○	○
	50g	○	○	○	○	○
	100g	○	○	○	○	○
	500g	○	○	○	○	○
	1kg	○	○	○	○	○

High Viscosity

Enables coating and bonding on vertical surfaces, such as walls, where conventional cyanoacrylate adhesives sag on the surface.

Non-Sag, Non-Stringing Cyanoacrylate Adhesive

■ Reduced Absorption into the Substrate

Excellent adhesion to liquid-absorbent porous materials.

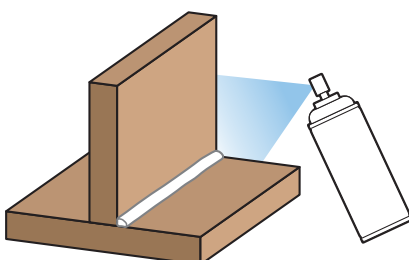
■ Slow Curing

Slow curing allows position correction. Suitable for large area bonding.

■ Suitable for Thick-Build Bonding

The use of a curing accelerator enables immediate bonding, even with thick applications.

Thick-Build Bonding



Category		2		
Product Name		Z106	GEL	SPEED GEL
Curing Type		Slow	Slow	Standard
Appearance		Transparent	Transparent	Transparent
Viscosity (mPa·s)		2000	Jelly	Jelly
Hardness (Shore D)		85	85	85
Set Time	Steel	30 s	40 s	25 s
	Aluminum	30 s	40 s	25 s
	ABS	20 s	30 s	10 s
	PMMA	30 s	40 s	15 s
	HPVC	30 s	40 s	20 s
	PC	40 s	50 s	20 s
	CR	15 s	15 s	10 s
	Wood (Birch)	—	60 s	50 s
Tensile Shear Strength (N/mm ²)	Steel	25	25	25
	Aluminum	16	16	16
	ABS	6*	6*	6*
	PMMA	6*	6*	6*
	HPVC	6*	6*	6*
	PC	9*	9*	9*
	CR	0.5*	0.5*	0.5*
	Wood (Birch)	—	15*	15*
Volume	3g×4		●	
	20g	○	●	●
	50g	○	●	
	100g	○		
	500g	○		
	1kg	○		

● GEL and SPEED GEL are packaged in aluminum tubes

* Material failure

Cyanoacrylate Adhesives

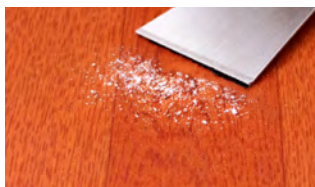


Machinable

The cured resin is softer than standard cyanoacrylate adhesives, allowing for easier machining and cutting.

Cyanoacrylate Adhesive with Enhanced Machinability

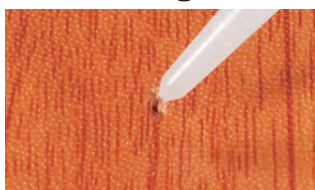
● Good Machinability



● Easy to Sand



● Ideal for Filling Fine Voids



Recommend for use with ALTECO Spray Primer. (p.12)



Category		2		
Product Name		Z195 ■	Z195-1 ■	Machinable Gel
Curing Type		Slow	Slow	Slow
Appearance		Transparent	Transparent	Transparent
Viscosity (mPa·s)		500	1000	Jelly
Hardness (Shore D)		50	50	65
Set Time	Steel	45 s	60 s	90 s
	Aluminum	60 s	75 s	90 s
	ABS	10 s	15 s	30 s
	PMMA	60 s	75 s	60 s
	HPVC	300 s	300 s	300 s
	PC	120 s	150 s	90 s
	CR	30 s	30 s	30 s
	Wood (Birch)	90 s	180 s	300 s
Tensile Shear Strength (N/mm ²)	Steel	15	15	15
	Aluminum	10	10	10
	ABS	6*	6*	6*
	PMMA	6*	6*	6*
	HPVC	2	2	2
	PC	6	6	6
	CR	0.5*	0.5*	0.5*
	Wood (Birch)	10	10	10
Volume	20g			●
	50g	○		
	100g		○	
	500g			
	1kg			

● Machinable Gel is packaged in the aluminum tube.

* Material failure

■ Made to order

For Wood Surface Repair

Various adhesives and putties have traditionally been used to fill holes and repair cracks in wood. ALTECO proposes a more efficient solution using our cyanoacrylate adhesive.

● Repair Example



1 Fill cracks and knots with wood powder from the same wood species.



2 Apply cyanoacrylate adhesive onto the filled wood powder.



3 After curing, level the surface using a plane or similar tool. Finish by applying paint.

● After the Repair



● Curing Performance and Properties

The adhesives are formulated with curing speeds and hardness levels suitable for wood repair.

Product Name	Z114	Z198
Wood Powder Curing Time	4~5s	7~9s
Hardness	Hard	Semi-Hard

● Advantages of the Method

■ Fast Curing

The faster curing speed enables high work efficiency.

■ Excellent Finish

Using wood powder provides a finish similar to natural wood.

■ Easy to Machinable

Choose soft to hard cyanoacrylate adhesive depending on the wood material.

Cyanoacrylate Adhesives



For Artificial Marble Bonding

Faster curing than polyester-based adhesives.
Reduces processing time.

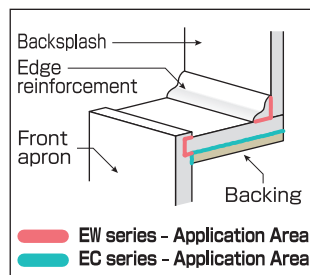
EC series - Clear Type

Clear adhesive ideal for backside bonding applications.

EW series - High Opacity Type

White color conceals the bond line and provides a smooth finish.

- Custom colors available upon request.
- Recommended for use with ALTECO curing accelerator for excess adhesive curing. (Spray Primer or PR150)



Category		2						
Product Name		EC200	EC600X	EC1000 	EC1500X	EW300N 	EW1000N	EWN
Curing Type		Fast	Fast	Standard	Fast	Standard	Standard	Slow
Appearance		Transparent	Transparent	Transparent	Transparent	White	White	White
Viscosity (mPa·s)		200	600	1000	1500	300	1000	8000
Suitable Materials	Metal	○	○	○	○	○	○	○
	Plastics	○	○	○	○	○	○	○
	Artificial marble	◎	◎	◎	◎	◎	◎	◎
	Wood, Porous Materials	◎	◎	◎	◎			
Acrylic Artificial Marble	Set Time	5 s	5 s	15 s	10 s	15 s	15 s	60 s
	Compressive Shear Strength (N/mm²)	25*	25*	25*	25*	25*	25*	25*
	Compressive Shear Strength after 24h Boiling (N/mm²)	8	8	10	10	20	20	20
Volume	50g	○	○	○	○	○	○	○
	100g	○	○	○	○	○	○	○
	300g							●

●:300g size is available in laminated tube packaging.

For Polystyrene Foam Bonding

Enables bonding of polystyrene foam, which cannot be bonded with conventional cyanoacrylate adhesives.

■ Safe for Polystyrene Foam

As conventional cyanoacrylate adhesives dissolve polystyrene foam, polystyrene foam is difficult to bond.

This product overcomes that limitation, enabling effective bonding.

■ Extended Open Time

Extended open time allows bonding of large objects and accurate positioning.

■ Compatible with Various Materials Beyond Polystyrene Foam

Allows reliable bonding between polystyrene foam and various materials—including wood, plastic, and metal.



Category		2	
Product Name		FS800	FS800B ■
Curing Type		Slow	Slow
Appearance		Transparent	Pale Blue Transparent
Viscosity (mPa·s)		800	800
Hardness (Shore D)		40	40
Set Time	Polystyrene Foam	360 s	360 s
	Steel	10 s	10 s
	Aluminum	10 s	10 s
	ABS	10 s	10 s
	PMMA	240 s	240 s
	HPVC	900 s	900 s
	PC	60 s	60 s
	CR	10 s	10 s
	NBR	30 s	30 s
Tensile Shear Strength (N/mm²)	Polystyrene Foam	0.1 *	0.1 *
	Steel	4	4
	Aluminum	4	4
	ABS	4	4
	PMMA	6 *	6 *
	HPVC	6	6
	PC	4	4
	CR	0.5 *	0.5 *
	NBR	0.5	0.5
Volume	20g	○	
	50g	○	○
	100g	○	
	500g		
	1kg		

* Material failure

■ Made to order

Cyanoacrylate Adhesives



Selector Guide

Capable of bonding most materials commonly used in industrial applications.

Note: This table serves as a guideline for selecting adhesives. Please choose the material to be bonded and select the most suitable product based on required conditions such as viscosity, curing speed, and bond strength.

	Wood	Ceramics	Stone	EPDM	Chloroprene	Natural Rubber	TPO	Silicone	PP / PE / PBT	Nylon	Polyurethane	POM	Polyester	PET	PC	Phenol Resin	PVC	PMMA	ABS	Plated Surface	Steel / Aluminum / SUS
Steel / Aluminum / SUS	W	CN W	EE W	D EZ	EE CN	D	88 EZ	EE CN	D EZ	D EZ	88 EZ	88 EZ	D EZ	D CN	EE CN	EE CN	EE CN	EE CN	EE CN	CN M	CN M
Plated Surface	W	CN W	EE W	D EZ	EE CN	D	88 EZ	EE CN	D EZ	D EZ	88 EZ	88 EZ	D EZ	D CN	EE CN	EE CN	EE CN	EE CN	EE CN	CN M	
ABS	W	CN W	EE W	D EZ	EE	D	88 EZ	EE	D EZ	D EZ	88 EZ	88 EZ	D EZ	D EZ	EE	EE	EE	EE	EE		
PMMA	W	CN W	EE W	D EZ	EE	D	88 EZ	EE	D EZ	D EZ	88 EZ	88 EZ	D EZ	D EZ	EE	EE	EE	EE			
PVC	W	CN W	EE W	D EZ	EE	D	88 EZ	EE	D EZ	D EZ	88 EZ	88 EZ	D EZ	D EZ	EE	EE	EE				
Phenol Resin	W	CN W	EE W	D EZ	EE	D	88 EZ	EE	D EZ	D EZ	88 EZ	88 EZ	D EZ	D EZ	EE	EE					
PC	W	CN W	EE W	D EZ	EE	D	88 EZ	EE	D EZ	D EZ	88 EZ	88 EZ	D EZ	D EZ	EE						
PET	EZ	EZ	EZ	D EZ	D EZ	D EZ	88 EZ	D EZ	D EZ	D EZ	88 EZ	88 EZ	D EZ	D EZ							
Polyester	EZ	EZ	EZ	D EZ	D EZ	D EZ	88 EZ	D EZ	D EZ	D EZ	88 EZ	88 EZ	D EZ								
POM	EZ	EZ	EZ	88 EZ	88 EZ	88 EZ	88 EZ	88 EZ	D EZ	88 EZ	88 EZ	88 EZ									
Polyurethane	EZ	CN W	EZ	D EZ	D EZ	D EZ	88 EZ	D EZ	D EZ	D EZ	88 EZ										
Nylon	EZ	CN W	EZ	D EZ	D EZ	D EZ	88 EZ	D EZ	D EZ	D EZ											
PP / PE / PBT	EZ	EZ	EZ	D EZ	D EZ	D EZ	88 EZ	D EZ	D EZ												
Silicone	EZ	EZ	EZ	D EZ	D EZ	D EZ	88 EZ	88 EZ													
TPO	EZ	EZ	EZ	88 EZ	88 EZ	88 EZ	88 EZ														
Natural Rubber	W	CN W	EE W	D EZ	D T	D T															
Chloroprene	W	CN W	EE W	D EZ	EE T																
EPDM	EZ	EZ	EZ	D EZ																	
Stone	W	CN W	EE W																		
Ceramics	W	CN W																			
Wood	W																				

Use PR500 or PR560 to improve adhesion.

Prime with PR700.

Prime with PR500 or PR560.

When You Want to Speed Up the Curing Time >>>>

Use the EZ series (fast- or ultra-fast-curing types) or the HK series (dual-cure types). Alternatively, use together with an accelerator such as Spray Primer or PR150.

When You Want to Slow Down the Curing Time >>>>

Use Z106, GEL (slow-curing types).

When You Want to Prevent Blooming >>>>

Use Z26, Z27, or Z28S (low bloom type), Z84 series (no blooming type) or HK series (dual cure). Alternatively, use together with an accelerator such as Spray Primer or PR150.

When Odor Is a Concern >>>>

Use Z26, Z27, Z28S (low odor type) or the Z84 series (no odor type).

For Gap Filling and Penetration Control >>>>

Use W series (medium to high viscosity types) or HK series (dual cure).

For Overhead or Vertical Bonding, Filling, and Thick-Build Applications >>>>

Use GEL or SPEED GEL (gel-type).

For Hard-to-Bond Substrates >>>>

Use D, 88, etc. (adhesives for hard-to-bond materials), or use in combination with PR500, PR560, PR700, etc. (primers for hard-to-bond materials).

When Bonding Fluororesin >>>>

Use with PR960.

Adhesive Terminology

ABS	Acrylonitrile Butadiene Styrene Resin	PE	Polyethylene
CR	Chloroprene Rubber	PET	Polyethylene Terephthalate
EPDM	Ethylene Propylene Diene Monomer	PMMA	Polymethyl Methacrylate (Acrylic Resin)
HPVC	Hard Polyvinyl Chloride	POM	Polyoxymethylene (Polyacetal)
NBR	Nitrile Butadiene Rubber	PP	Polypropylene
PBT	Polybutylene Terephthalate	SUS	Stainless Steel
PC	Polycarbonate	TPO	Thermoplastic Olefin

Dissolution and Cracking of Plastics

When cyanoacrylate adhesives are used for bonding plastics such as polystyrene foam, PC, acrylic, and ABS, the material surface may dissolve or crack.

[Prevention Methods]

- To prevent cyanoacrylate adhesive overflow, apply only the minimum required amount.
- Use EZ series products (fast- or ultra-fast-curing types).
- Reduce residual stress inside molded plastic parts.
- For expanded polystyrene foam, use the FS800 series.

Cyanoacrylate Adhesives



Curing Accelerator

Further accelerates the curing of cyanoacrylate adhesives.

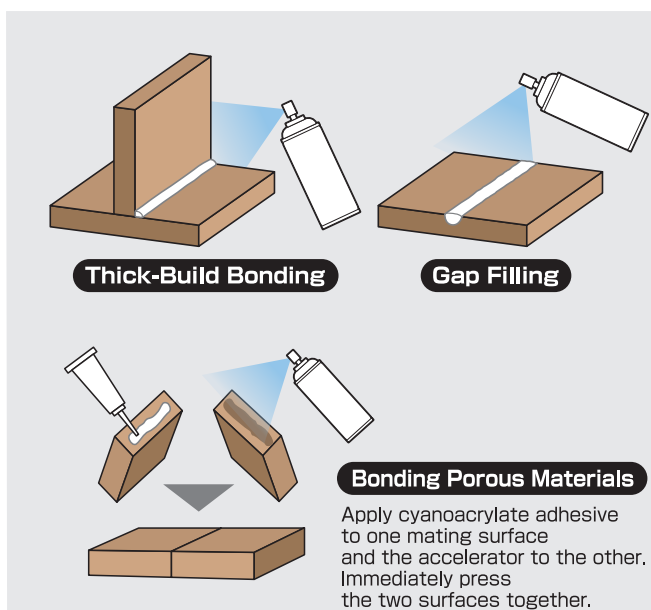
Faster Curing Improves Work Efficiency and Versatility

■ Improved Work Efficiency

Minimizes processing time by accelerating the curing of cyanoacrylate adhesives.

■ Simplifies Processes such as Bonding with a Thick Build and Gap-Filling

Facilitates reliable bonding in difficult applications, including thick-build bonding, gap filling, and bonding to porous substrates, thereby extending the scope of bonding applications.



Liquid



Aerosol

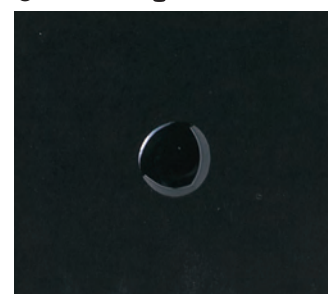
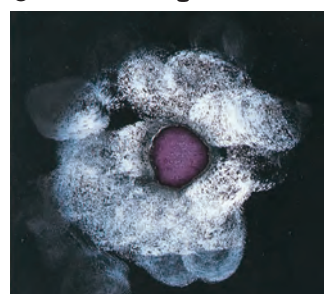


■ Prevent Blooming

Effectively prevent blooming typically caused by cyanoacrylate adhesives around the bonding area.

● Without Curing Accelerator

● With Curing Accelerator



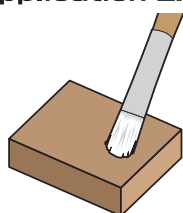
Product Name	PR150	PR310	Spray Primer	Low Odor Spray Primer
Properties	Liquid	Liquid	Aerosol	Aerosol
Main Component	Cyclopentane	Alcohol	Cyclopentane	Cyclopentane
Volume	250ml	250ml	100ml, 420ml	420ml

We also offer a variety of other curing accelerators. Please feel free to contact us for more information.

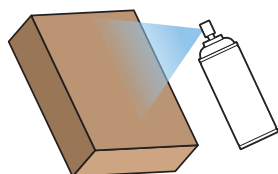
Instructions for Use

- ① Apply the accelerator to the mating surface opposite the one where the cyanoacrylate adhesive will be applied. Allow it to dry, then bond the surfaces. (For spray primers, apply from a distance of 10 to 20 cm.)
- ② For filling or thick-build bonding applications, apply the cyanoacrylate adhesive first, then drip or spray the accelerator over the bonding area. Do not apply excessive accelerator. A small amount is sufficient to achieve the desired effect. Excessive accelerator may cause color change and bonding failure.

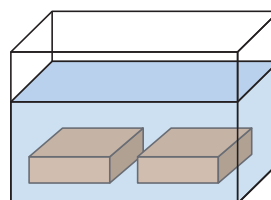
● Application Example



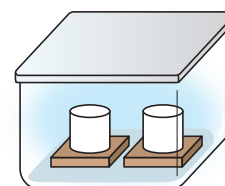
Brush with cloth or brush.



Spray.
(Spray Primer)



Immerse the substrates in the accelerator.



After bonding, place the bonded parts in an atmosphere containing curing accelerator vapor.

Cyanoacrylate Adhesives



Primers for Hard-to-Bond Materials

Primer for cyanoacrylate adhesives developed for hard-to-bond materials. Enables rapid bonding of PE, PP, silicone rubber, and various engineering plastics while improve adhesion.



Enables Bonding of Materials that are Hard to Bond with Cyanoacrylate Adhesives

Product Name		PR500	PR560	PR700	PR960
Applicable Materials		PE, PP, POM, EPDM Soft PVC, TPO	PP, PE, POM, EPDM Soft PVC, TPO, Nylon	Silicone Rubber Soft PVC	Fluororesin
Appearance		Colorless Transparent Liquid	Colorless Transparent Liquid	Colorless Transparent Liquid	Colorless Transparent Liquid
Specific Gravity		0.72	0.80	0.77	0.77
Main Component		Octane	Ethanol	Alcohol, Methylcyclohexane	Methylcyclohexane
Volume		250ml	250ml	250ml	250ml
Open Time		20min	12h	2h	5min
Tensile Shear Strength (N/mm ²)	PE	4*	4*	—	—
	PP	4*	4*	—	—
	EPDM	0.5*	0.5*	—	—
	Soft PVC	2*	2*	2*	—
	Silicone Rubber	Silicone Rubber	—	0.5*	—
		CR	—	0.5*	—
		Polyurethane	—	0.5*	—
	PTFE (Fluororesin)	—	—	—	2.5*

Open time: The period during which the primer remains effective after application. (The amount of time the primer is effective.) * Material failure

Open time depends on the substrate and working environment.

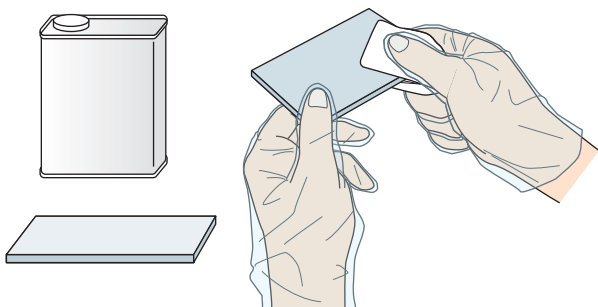
It is recommended to bond the substrates immediately after the primer has dried.

We also offer a variety of other primers for difficult-to-bond materials.

Please feel free to contact us for more information.

Instruction for Use

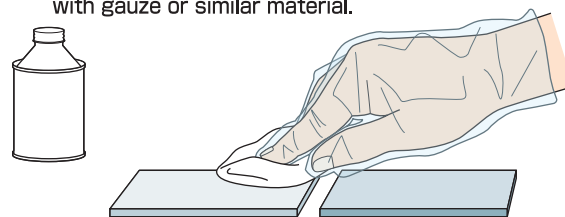
- ① Remove any dirt, oil, or other contaminants from the bonding surface.



- ② Impregnate gauze or similar material with the primer, and wipe the bonding surface 2 to 3 times, or apply with a brush.

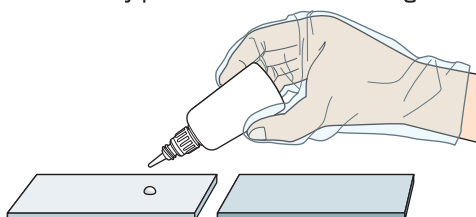
Note: Excessive application of PR500.

Avoid brush application and instead apply by lightly rubbing 2 to 3 times with gauze or similar material.

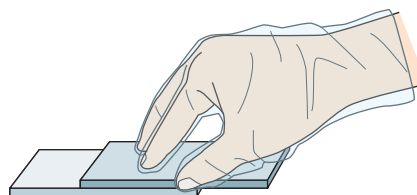


- ③ After the primer has dried, apply the appropriate amount of cyanoacrylate adhesive to the other mating surface in dots or lines. Immediately bond and hold in place.

Note: After applying, the primer is effective for several minutes to several hours (open time). However, once the surface has dried, immediately press the two surfaces together to bond.



- ④ Leave the bonded parts undisturbed for approximately 30 minutes until practical strength is achieved. For silicone rubber, only a few minutes may be sufficient.



Cyanoacrylate Adhesives



Container Types and Sizes

ALTECO offers container sizes tailored to your application and usage volume. For product details or container sizes not listed on this page, please contact us.

Available in a Variety of Sizes



2g



20g



50g



100g



500g



1kg



Aluminum Tube

General Properties

Properties Before and After Curing

Monomer (Before curing, liquid)

Category	1	2	3	4
Appearance	Colorless Transparent Liquid			
Specific Gravity (d_{4}^{20})	1.100	1.056	0.976	1.070
Freezing Point (°C)	1.5	-29.5	-2.0	-20 ≤
Flash Point (Open Cup) (°C)	101	83 (Closed Cup)	99	117
Autoignition Temperature (°C)	465	485	410	330

Category 1 Excellent adhesion to metal and excellent chemical resistance

Category 2 Various products with different features

Category 3 Low Odor, Low Bloom

Category 4 No Odor, No Bloom

Polymer (After curing, solid)

Category	1	2	3	4
Appearance	Colorless Transparent Solid			
Specific Gravity	1.260	1.244	1.126	1.171
Softening Point (°C, Vicat)	165	145	110	60
Glass Transition Temperature (°C)	170	140	125	80
Coefficient of Thermal Expansion $\times 10^{-4}$	0.9	1.1	1.3	1.0
Dielectric Constant (10MC, 10°C)	3.5	3.5	3.5	3.5
Dissipation Factor (10MC, 10°C)	0.07	0.07	0.07	0.07
Dielectric Breakdown Voltage (kV/0.1mm, 23°C)	14	14	14	14
Volume Resistivity (Ω cm, 30°C)	10^{14}	10^{14}	10^{14}	10^{14}
Solubility	DMF DMSO	Acetone DMF, DMSO		

The data provided in this catalog are for reference only and may differ under actual conditions.
They do not guarantee product performance.
Before use, please conduct sufficient testing to ensure suitability for your specific application.
Please note that product design and appearance are subject to change without prior notice.
Refer to the Safety Data Sheet (SDS) issued by our company and ensure safe usage under your own responsibility.
All chemical products may have unknown hazards; therefore, handle them with due care.

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ISO9001:2015 Certified
ISO14001:2015 Certified
Shiga factory

● Distributor