ALTECO

Industrial Adhesives Catalog

Perfecting the Power to Connect with a Single Drop

Create × Innovate

Anaerobic Adhesives
& Light-Cure Adhesives

Create & Innovate

Anaerobic Adhesives
Light-Cure Adhesives

We continue the challenge of developing people and the environmental friendly adhesives

ALTECO's anaerobic and light curing adhesives offer optimized solutions for a wide range of industries, including electronics, automotive, industrial machinery, and medical devices.

Anaerobic Adhesive

Excellent Strength ····· Suitable for metal bonding.
Suitable for thread locking, retaining, and structural bonding.

Excellent Durability ····· Excellent thermal resistance, water resistance, environmental resistance, chemical resistance.

Environmental Regulation Compliant ····· RoHS compliant.

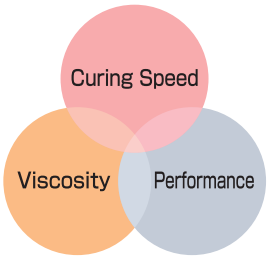
Light-Cure Adhesive

Fast Curing ····· Minimizing processing time.

Environmental Regulation Compliant ····· Solvent free, RoHS compliant.

Customized Adhesive Solutions

ALTECO offers a wide range of grades beyond standard products, tailored to various materials and application conditions. If no existing type meets your required performance, please consider using ALTECO's customized adhesive system.
ALTECO can formulate original adhesives based on specific needs such as bonded materials, viscosity, curing speed, strength, and application volume.
Color customization is also available to allow visual confirmation of adhesive application.
Detailed consultation is required when placing an order. For more information, please contact us.



 Contact us for information on lead time and order quantity for made-to-order items.

Anaerobic Adhesives

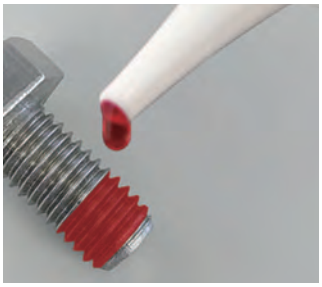
After applying between metal mating surfaces, the adhesive starts to cure in the absence of air.

Metal surface + Exclusion of air = Curing

Thread Locker

Anaerobic adhesive for metal screws. Specifically designed for metal screws, this anaerobic adhesive not only prevents loosening caused by shock and vibration but also seals against leakage of water and other substances through the threaded area.

●For locking and sealing metal threaded fasteners.



AY1011 (Low strength) For temporary fixing, can be removed with tools.

AY1021 (Medium strength) For maintenance-removable screws disassembled by tools.

AY1031 (High strength) For permanent locking of screws. Suitable not only for active metals such as steel and brass, but also for less reactive substrates such as stainless steel and plated surfaces.

Product Number	AY-1011■	AY-1021	AY-1031	AY-1041■
Applications	Thread locker	Thread locker	Thread locker	Thread locker
Features	Low strength	Medium strength	High strength	Wicking
Specific Gravity (d_4^{20})	1.1	1.1	1.1	—
Fixture Time	15min	15min	15min	45sec (with AY-910 accelerator)
Appearance	Purple (Fluorescent)	Blue (Fluorescent)	Red (Fluorescent)	Green (Fluorescent)
Viscosity (mPa·s)	350 (Thixotropic)	1000 (Thixotropic)	600	15
Break / Prevail Torque (N・m)	6／2	15／6	38／28	7／23
Temperature Range (℃)	～150	～150	～150	—
Ideal Fastener Diameter	≦M12	≦M20	≦M20	≦M12
Volume	50ml	50ml	50ml	250g

Test method: In accordance with JIS K 6833 (1994), general test methods for adhesives.

■Made to order

For Structural Bonding

Anaerobic adhesives suitable for structural bonding where high load-bearing capacity and environmental resistance are required. Ideal for bonding components such as motor magnets and speaker parts.

Product Number	AY-3601■	AY-3602■	AY-3603■
Applications	Motor magnet	Motor magnet	Motor magnet
Features	UV fillet curing Dissimilar substrate bonding	UV fillet curing Dissimilar substrate bonding	UV fillet curing Dissimilar substrate bonding
Specific Gravity (d_4^{20})	1.1	1.1	1.1
*Fixture Time	20min	20min	20min
Appearance	Blue	Blue	Blue
Viscosity (mPa·s)	10000 (Thixotropic)	5000 (Thixotropic)	2500 (Thixotropic)
Hardness (Shore D)	60	60	60
Tg (℃)	95	95	95
Tensile Shear Strength (N/mm^2)	20	20	20
Temperature Range (℃)	～120	～120	～120
UV Curing Performance ($\times 100mW/cm^2$)	25min	25min	25min
Volume	250g	250g	250g

Fixture time with AY-910 accelerator.

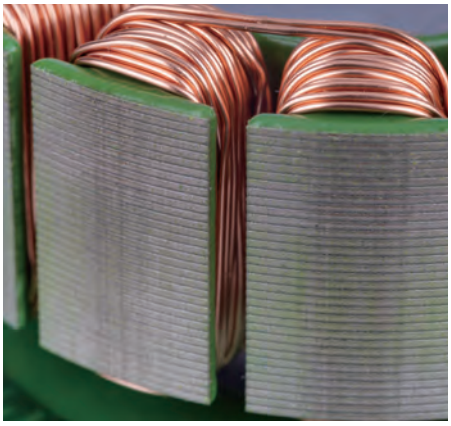
■Made to order

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.

Anaerobic Adhesives

Anaerobic Retainer

Room temperature curing anaerobic retainer. For joining cylindrical parts such as bearings and gears to shafts.
Processing laminated steel sheets for motors.



Product Number	AY-2300 ■	AY-2310 ■	AY-2410 ■	AY-2208 ■	AY-2211 ■
Applications	Interference fit	Interference fit Laminated steel sheets	Interference fit Laminated steel sheets	Interference fit	Interference fit
Features	Standard	High strength	High strength and High temperature resistant	Fillet UV curing Self drying	Fillet UV curing
Specific Gravity (d_4^{20})	1.1	1.1	1.1	1.1	1.1
*Fixture Time	120sec	10sec	15sec	15sec	15sec
Appearance	Blue (Fluorescent)	Blue	Green	Green	Green
Viscosity (mPa·s)	150	500	2500 (Thixotropic)	2500	650
Compressive Shear Strength (N/mm^2)	18	30	20	30	25
Maximum Applicable Gap (mm)	0.15	0.15	0.25	0.25	0.20
Temperature Range (℃)	~150	~150	~200	~150	~120
Volume	250g	250g	250g	250g	250g

Fixture time with AY-910 accelerator.

■ Made to order

Activator

This is a primer that promotes the curing of anaerobic adhesives.
It improves curing performance in hard-to-bond environments or on low-reactivity substrates.

品 番	AY-910 ■	AY-920 ■
Appearance	Green Clear Liquid	Green Clear Liquid
Main Component	Ethanol	Methacrylate monomer
Active Chemical	Copper carboxylate	Copper compound
Volume	250ml	250ml

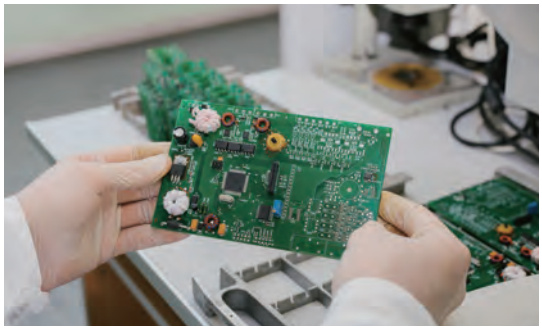
■ Made to order

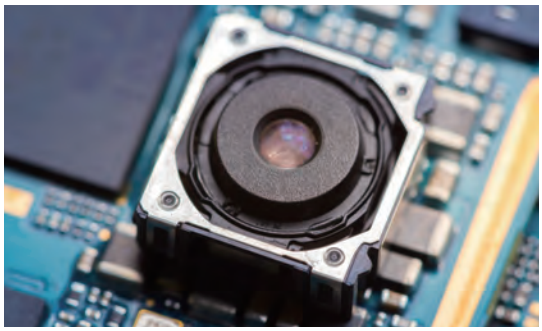
Contact us for information on lead time and order quantity for made-to-order items.

Light-Cure Adhesives

For Plastic Bonding

Light-curing adhesive with excellent adhesion to plastics. Also excellent adhesion to metal and glass.
Applicable for flexible printed circuit board(FPC), glass module and sensor bonding.





Product Number	AY-4364 ■	AY-4720 ■	AY-4031 ■
Applications	Plastic bonding FPC fixturing	Plastic bonding FPC fixturing	Plastic bonding Camera module Sensor
Features	Visible light LED curing	Flexible Tacky LED curing	Black (Anti-reflective) LED curing
Specific Gravity (d_4^{20})	1.1	1.1	1.4
Fixture Time (UV Intensity: 6mW/cm²)	2sec	2sec	2sec
Appearance	Pale Yellow, Transparent	Pale Yellow, Transparent	Black
Viscosity (mPa·s)	750	10000	6000
Hardness (Shore D)	60	45(Shore A)	70
Elongation (%)	165.5	230	—
Tensile Shear Strength (N/mm²)	PC/PC 9.2* PET/PET 8.0	PC/PC 1.3 Glass/Glass 3.2	PC/PC 3.5 Glass/Glass 5.0 Glass/LCP 2.5
Volume	500g	500g	500g

*Material failure ■Made to order

For Glass Bonding

Light-curing acrylic adhesive with excellent adhesion to glass.
Ideal for bonding in glass crafts and glass display cases.

Product Number	AY-4856 ■	AY-4857 ■	AY-4858 ■
Applications	Glass bonding Capillary flow bonding	Glass bonding	Glass bonding
Features	Low viscosity LED curing	Medium viscosity LED curing	High viscosity LED curing
Specific Gravity (d_4^{20})	1.1	1.1	1.1
Fixture Time (UV Intensity: 6mW/cm²)	1sec	1sec	1sec
Appearance	Pale Yellow, Transparent	Pale Yellow, Transparent	Pale Yellow, Transparent
Viscosity (mPa·s)	100	400	1000
Hardness (Shore D)	82	80	81
Elongation (%)	4.4	10.6	13.1
Tensile Shear Strength (N/mm²)	Glass/Glass 5.3	Glass/Glass 7.7*	Glass/Glass 9.0*
Volume	500g	500g	500g

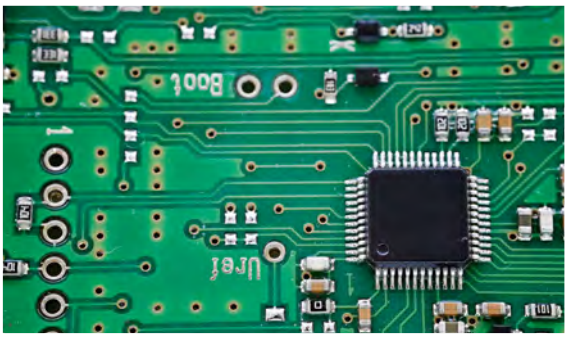
*Material failure ■Made to order

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.

Light-Cure Adhesives

For Coating and Potting

This light-curing adhesive offers excellent surface-curing performance
and cures to a tack-free finish even under low light intensity.
It is suitable for bonding applications such as fishing rods and flexible printed circuits (FPCs).



Product Number	AY-4131 ■
Applications	Coating Potting
Features	Cures under low intensity LED light Visible light curable
Specific Gravity (d_4^{20})	1.1
Fixture Time (UV Intensity: 6mW/cm²)	1 sec
Appearance	Transparent
Viscosity (mPa·s)	1500
Hardness (Shore D)	80
Elongation (%)	130
Tensile Shear Strength (N/mm²)	Glass/Glass 4.0
Volume	500g

■ Made to order

Wavelength and UV Lamp

Light-curing adhesives primarily cure under ultraviolet (UV) wavelengths.
ALTECO also offers grades that cure under visible light.
We also provide a variety of UV lamps optimized for light curing.
Please feel free to contact us for solutions tailored to your specific application and environment.

UV-C	UV-B	UV-A	Purple	Blue	Green-Blue	Cyan	Green	Yellow-Green	Yellow	Orange	Red	Reddish-Purple
100nm | 280nm	280nm | 315nm	315nm | 400nm	400nm | 435nm	435nm | 480nm	480nm | 490nm	490nm | 500nm	500nm | 560nm	560nm | 580nm	580nm | 595nm	595nm | 610nm	610nm | 750nm	750nm | 800nm

Ultraviolet region | Visible light region

● UV-LED lamp

● Handheld UV lamp

● Benchtop conveyor light curing system

Contact us for information on lead time and order quantity for made-to-order items.

Handling Precautions for Various Adhesives

Cyanoacrylate Adhesives

Precautions for Use

In Case of Contact with Skin

Do not forcefully peel it off. Soak the area in warm water (around 40℃) and gently rub until it loosens, or use a dedicated debonding agent or a solvent such as acetone.

In Case of Contact with Eyes

Rinse thoroughly with clean water repeatedly and seek medical attention.
Do not rub your eyes or use any debonding agent or solvent such as acetone.

In Case of Inhalation

Move to a place with fresh air and rinse your mouth.
If symptoms persist, consult a physician.

In Case of Ingestion

Small amounts solidify quickly. Rinse your mouth with plenty of water and gently remove any hardened adhesive by hand.
In the case of large amounts, burns may occur - cool the area with water and seek immediate medical attention.

In Case of Spillage

Large amounts spilled on cloth may generate heat and cause burns - handle with care. It may not be removable once absorbed.
If spilled on surfaces such as desks, wear polyethylene gloves and wipe off gradually before it cures.
Once cured, test a small, inconspicuous area for surface damage before using acetone or similar solvent to remove it gradually.

Work Environment

Ensure adequate ventilation, as the product emits a strong odor.
Prolonged or repeated exposure may irritate the eyes, throat, and nose.
Take regular breaks in fresh air to protect your health. Also, use the product in a fire-free environment.

Precautions After Use

Wipe off the nozzle tip after use and securely cap the container.
Store in a cool, dry, and dark place away from fire sources.

Keep out of reach of infants and young children, and take precautions to avoid misuse.

Avoid exposure to direct sunlight, as the adhesive may also cure under ultraviolet light.

Do not store the product in alkaline environments or near curing accelerators or amine-based substances.

Disposal Instructions

- Expose small amounts of the adhesive to direct sunlight to cure, then dispose of it as plastic waste.
- Dispose of the product in accordance with local disposal regulations.

Epoxy Adhesives / Anaerobic Adhesives / Light-Cure Adhesives

Precautions for Use

In Case of Contact with Skin

Wipe off immediately and wash thoroughly with soap and water or warm water.
If itching or inflammation occurs, seek medical attention promptly.

In Case of Contact with Eyes

Rinse thoroughly with plenty of water immediately and consult a physician as soon as possible.

In Case of Inhalation

If abnormal symptoms such as itching occur due to inhalation of fumes or vapor, seek medical attention immediately.

In Case of Ingestion

Do not induce vomiting.
Seek medical attention promptly.

In Case of Spillage

Wipe up with paper or cloth.
If a large amount is spilled, collect it in a sealed container.

Work Environment

Install local exhaust ventilation in work areas where mixing, dispensing, application, or bonding is carried out.

In Case of Fire

Cut off any sources of combustion and extinguish the fire from upwind using an appropriate fire extinguisher, such as a dry chemical (ABC type) or carbon dioxide (CO_2) extinguisher.

Proper Workwear

Wear impermeable gloves and long-sleeved work clothing to prevent direct contact with the body.
Avoid handling the product directly with bare hands.

Precautions After Use

Wipe the container and nozzle tips clean, replace the cap, and store under the specified conditions.

Keep out of reach of infants and young children, and take precautions to avoid misuse.

Wash hands and gargle thoroughly after use.

Disposal Instructions

- Dispose of the product in accordance with applicable local laws and regulations, or entrust disposal to a licensed waste disposal contractor. Dispose of used containers and cloths in the same manner.

Glossary of Adhesives Terms

Set Time
Time required for the bonded parts to cure sufficiently to be handled or moved to the next process without damage. JIS defines it as the time it takes to withstand a 50N force.

Tensile Shear Strength
Maximum load at which the bonded test specimen fails when a tensile shear force is applied, divided by the bonded area.

Compressive Shear Strength
Maximum load at failure under compressive shear force, divided by the bonded area.

Pot Time
Time during which the mixed adhesive remains usable for application. Typically defined as the time to double the initial viscosity or reach 60% of the exothermic peak.

Curing Time
Time at which the adhesive begins to exhibit stable mechanical properties such as tensile, compressive strength, or hardness.

Thixotropic
Property of a material that is gel-like at rest but becomes fluid when agitated or stirred, and returns to gel-like state upon resting.

Break Torque
The torque required to start turning a fastener after the adhesive has fully cured.

Prevail Torque
The torque needed to continue turning a fastener after the initial breakaway, due to residual cured adhesive in the thread gaps.

Maximum Applicable Gap
The maximum bond gap between substrates that still allows for sufficient bonding strength.

Pot Life
Time after mixing during which the adhesive remains in a usable, applicable state.

UV Intensity
Measured radiant energy of ultraviolet light used for curing.

Tg (Glass Transition Temperature)
The temperature at which a cured material transitions from a hard, glassy state to a soft, rubbery state.

Coefficient of Thermal Expansion
The rate at which a material's length changes with temperature.

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.

ALTECO INC.

Head Office: 5-8,Nishiekimaecho,Ibaraki-City,Osaka 567-0032
TEL:+81-726-27-1617 FAX:+81-726-27-1633
Tokyo Office:2-7,Kandatacho,Chiyoda-ku,Tokyo 101-0046
TEL:+81-3-3518-5305 FAX:+81-3-3256-1533
Nagoya Office:1-18-11,Nishiki,Naka-ku,Nagoya-City, Aichi 460-0003
TEL:+81-52-211-1340 FAX:+81-52-232-1518

■URL https://www.alteco.co.jp/en
■E-mail info@alteco.co.jp

ISO9001:2015 Certified
ISO14001:2015 Certified
Shiga factory

● Distributor

2510①