

Perfecting the Power to Connect with a Single Drop

Speed × Power
Cyanoacrylate Adhesives

Quick × Strong Epoxy Adhesives

Create × Innovate
Anaerobic Adhesives
& Light-Cure Adhesives



Quick & Strong Epoxy Adhesives







adhesives

ALTECO epoxy adhesives deliver excellent performance, including high bonding strength, heat resistance, and chemical resistance. A wide range of grades is available to meet diverse requirements, from electrical and electronic applications to industrial equipment use.

Excellent Compatible with a wide range of substrates.

Adhesion

Excellent Excellent heat resistance, water resistance, Durability weather resistance, and chemical resistance.

Electrical Does not conduct electricity.

Insulation Provides excellent insulating properties.

Low Curing Solvent free, virtually no shrinkage upon curing.

Shrinkage

Environmental Compliant with various environmental regulations.

Regulation Compliant

*For details, contact us.

Skin Irritation Prevention

Epoxy adhesives may cause irritation to the skin, eyes, throat, and mucous membranes, leading to rashes or itching.

Repeated exposure may result in sensitization. Use with caution.

- (1) Use in ventilated area. Wear safety googles, glasses, masks, and gloves.
- (2) Clean the work environment (desk, containers), and immediately wipe off any spills or residues.
- (3) After finishing work, wash your hands thoroughly with soap and water.
- (4) If skin irritation occurs, consult a doctor.







Fast Curing (Thixotropic) Two-Component

Fast-curing, thixotropic, non-sagging two-component epoxy resin adhesive.

Fast

Fast curing epoxy adhesives cured in 5 and 30 minutes after mixing a base resin and a hardener.

■ Thixotropic

Translucent no sag. Allows buildup and gap filling bonding.





| Product Number | F-05 | | F-S | 30 |
|--|--|---------------------------------|--|---------------------------------|
| | Base Resin | Hardener | Base Resin | Hardener |
| Applications | General purpose bonding (Metal, Glass, Ceramics, Wood, Plastics) | | General purpose bonding (Metal, Glass, Ceramics, Wood, Plastics) | |
| Features | ●5minutes cur ● Low-VOC / Low JAIA F★★★★ | 0 | ● 30minutes curing ● Low-VOC / Low formaldehyde – JAIA F★★★ / 4-VOC standard | |
| Appearance | Milky White | White Translucent | Milky White | White Translucent |
| Color After Curing | Milky White | | Milky White | |
| Main Component | Modified epoxy resin | Modified thiol | Modified epoxy resin | Modified thiol |
| Viscosity (mPa·s / 25°C) | Paste | Paste | Paste | Paste |
| Specific Gravity (d ²⁰ ₄) | 1.16 | 1.13 | 1.20 | 1.20 |
| Mixing Ratio | 100:100 | | 100:100 | |
| Open Time (25℃) | 3n | nin | 20 | min |
| Curing Time | 5n | nin | 30 | min |
| Tensile Shear Strength (N/mm²) | 15 | | 1 | 5 |
| Hardness (Shore D) | 78 | | 78 | |
| Shelf Life | 1 year | | 1 ye | ear |
| Volume / Packaging | 70gset Alum 1kgset Plast | ninum tube ic laminated tube | 45gset Alum 1kgset Plast | ninum tube ic laminated tube |

Test method: In accordance with JIS K 6833 (1994), general test methods for adhesives. In accordance with JIS K 6850 (1999), tensile shear adhesive strength testing method for adhesives and rigid substrates.



Fast Curing (Clear) Two-Component

Transparent formula that helps conceal applied areas. Fast curing two-component epoxy adhesive.

Fast

Fast curing epoxy adhesives cured in 5 and 30 minutes after mixing a base resin and a hardener.

Clear

Transparent formula that helps conceal applied areas.





| Product Number | F-05C | | F-3 | 80C |
|--|--------------------------------------|---------------------|--|---------------------|
| | Base Resin | Hardener | Base Resin | Hardener |
| Applications | applications requiring transparency. | | Suitable for general bonding applications requiring transparency. (Metal, Glass, Ceramics, Wood, Plastics) | |
| Features | | | ● 30minutes curing ● Clear type of F-30 ● Low-VOC / Low formaldehyde - JAIA F★★★ / 4-VOC standard | |
| Appearance | Transparent | Yellow, Transparent | Transparent | Yellow, Transparent |
| Color After Curing | Pale Yellow, Transparent | | Pale Yellow, Transparent | |
| Main Component | Modified epoxy resin | Modified thiol | Modified epoxy resin | Modified thiol |
| Viscosity (mPa·s/25°C) | 15000 | 13000 | 15000 | 16000 |
| Specific Gravity (d ²⁰ ₄) | 1.17 | 1.13 | 1.17 | 1.14 |
| Mixing Ratio | 100 | 100:100 | | :100 |
| Open Time (25°C) | 3r | nin | 20 | min |
| Curing Time | 5r | nin | 30 | min |
| Tensile Shear Strength (N/mm²) | 10 | | 1 | 5 |
| Hardness (Shore D) | 80 | | 8 | 10 |
| Shelf Life | lyear | | 1 y | ear |
| Volume / Packaging | 1kg set Plasti | ic laminated tube | 1kg set Plasti | c laminated tube |



For Molding Two-Component

A two-component epoxy adhesive that cures to a highly transparent, glossy finish.

Transparency

Offers superior transparency and resistance to yellowing; ideal for casting, coating, and potting.

Low Viscosity

The low viscosity enables precise filling of small areas and makes it suitable for coating when applied with brushes or spatulas.



| Product Number | R-2007/H-1040 | | R-2007/H-2002 | |
|--------------------------------|---|--------------------|---|--------------------|
| | Base Resin | Hardener | Base Resin | Hardener |
| Applications | ●Small size molding | | Bonding, Molding, Potting, Coating Medium to large size molding For bonding and casting where transparency is required. | |
| Features | Room to medium temperature curing Low-VOC/Low formaldehyde-JAIA F***/4-VOC standard | | Ocuring conditions: Gel at room temperature after 24h, secondary cure at elevated temperature. Ocur-VOC/Low formaldehyde-JAIA F***/4-VOC standary. | |
| Appearance | Transparent | Transparent | Transparent | Transparent |
| Color After Curing | Transparent | | Transparent | |
| Main Component | Modified epoxy resin | Modified polyamine | Modified epoxy resin | Modified polyamine |
| Viscosity (mPa·s/25°C) | 3000 | 50 | 3000 | 80 |
| Specific Gravity (d 20/4) | 1.17 | 0.99 | 1.17 | 0.98 |
| Mixing Ratio | 100 | :40 | 100:40 | |
| Pot Life at 25℃ | 45 | min | 5 _n | nin |
| Curing Time | 24 | 24h | | 3h |
| Tensile Shear Strength (N/mm²) | 15 | | 1 | 4 |
| Hardness (Shore D) | 82 | | 8 | 0 |
| Shelf Life | 1 year | | 1 ye | ear |
| Volume / Packaging | Base resin :11 Hardener:40 | | Base resin :11 Hardener:40 | |

Test method: In accordance with JIS K 6833 (1994), general test methods for adhesives. In accordance with JIS K 6850 (1999), tensile shear adhesive strength testing method for adhesives and rigid substrates.



In Cartridge Two-Component

Enables simultaneous and accurate measuring, mixing, and dispensing.

High Work Efficiency

In 2-in-1 cartridge.

Mix and dispense by setting in cartridge gun.



The specialized dispensing gun is not included.

| Product Number | MAZERUN52 | | MAZER | JN300T |
|--------------------------------|--|--------------------|---|--------------------|
| | Base Resin | Hardener | Base Resin | Hardener |
| Applications | General purpose bonding (Metal, Glass, Ceramics, Wood, Stone, Concrete) | | For bonding and fixturing metal and wood construction materials Bonding and repair of car stop block, marbles, bricks, concrete blocks Insulation bonding and fixturing of electric parts, magnet | |
| Features | ● Room temperature curing ● No stain on white stones ● Low-VOC / Low formaldehyde - JAIA F★★★ / 4-VOC standard | | ●Room tempera ●Low-VOC / Low JAIA F★★★ / | _ |
| Appearance | White | Beige | White | Black |
| Color After Curing | Beige | | Gray | |
| Main Component | Modified epoxy resin | Modified polyamine | Modified epoxy resin | Modified polyamine |
| Viscosity (mPa·s/25°C) | Paste | Paste | Paste | Paste |
| Specific Gravity (d 20/4) | 1.34 | 1.16 | 1.17 | 1.10 |
| Mixing Ratio | 100 | :100 | 100 | :100 |
| Pot Life at 25℃ | 30 | min | 10 | min |
| Curing Time | 24 | 24h | | 4h |
| Tensile Shear Strength (N/mm²) | 20 | | 1 | 4 |
| Hardness (Shore D) | 7 | 7 | 8 | 10 |
| Shelf Life | 1 ye | ear | 1 ye | ear |
| Volume / Packaging | 50ml (| Cartridge | 300ml | Cartridge |





For General Purpose Two-Component

Two-component epoxy adhesive with a 1:1 weight ratio. Suitable for bonding a wide range of materials.

Application on Large Area

Extended curing time enables wide-area application and allows for easy removal of any excess material.

Strong Bonding on Wide Range of Materials

Bonds well to metal, glass, plastics, ceramics, and wood.





| Appearance Transparent Yellow Brown, Transparent Color After Curing Yellow, Transparent Main Component Modified epoxy resin Modified polyamin Viscosity (mPa·s 25°C) 20000 40000 Specific Gravity (d 20/4) 1.17 0.98 | Product Number | 6100 | | |
|---|--|--------------------------------|---------------------------|--|
| Applications (Metal, Glass, Ceramics, Wood, Plastics) General purpose Room temperature curing Low-VOC / Low formaldehyde - JAIA F*** / 4-VOC standard Appearance Transparent Yellow Brown, Transparent Wain Component Wiscosity (mPa·s / 25°C) Specific Gravity (d ²⁰ ₄) 1.17 O.98 | | Base Resin | Hardener | |
| Peatures ■ Room temperature curing ■ Low-VOC / Low formaldehyde – JAIA F★★★ / 4-VOC standard Appearance Transparent Yellow Brown, Transparent Yellow Brown, Transparent Main Component Modified epoxy resin Viscosity (mPa·s / 25°C) Specific Gravity (d ²⁰ / ₄) 1.17 O.98 | Applications | (Metal, Glass, Ceramics, Wood, | | |
| Color After Curing Yellow, Transparent Main Component Modified epoxy resin Modified polyamin Viscosity (mPa·s / 25°C) 20000 40000 Specific Gravity (d ²⁰ ₄) 1.17 0.98 | Features | ● Room temperature curing | | |
| Main Component Modified epoxy resin Modified polyamin Viscosity (mPa·s·/25°C) 20000 40000 Specific Gravity (d ²⁰ ₄) 1.17 0.98 | Appearance | Transparent | Yellow Brown, Transparent | |
| Viscosity (mPa·s / 25°C) 20000 40000 Specific Gravity (d ²⁰ ₄) 1.17 0.98 | Color After Curing | Yellow, Transparent | | |
| (mPa·s 25°C) 20000 40000 Specific Gravity (d 20/4) 1.17 0.98 | Main Component | Modified epoxy resin | Modified polyamine | |
| | Viscosity (mPa·s/25°C) | 20000 | 40000 | |
| | Specific Gravity (d ²⁰ ₄) | 1.17 0.98 | | |
| Mixing Ratio 100:100 | Mixing Ratio | 100 | :100 | |
| Pot Life at 25°C 1h | Pot Life at 25℃ | 1 | h | |
| Curing Time 24h | Curing Time | 24 | ¹ h | |
| Tensile Shear Strength (N/mm²) | | 13 | | |
| Hardness (Shore D) 80 | Hardness (Shore D) | 80 | | |
| Shelf Life 1year | Shelf Life | lyear | | |
| Volume / Packaging 2kg set Round metal can | Volume / Packaging | 2kgset Round metal can | | |

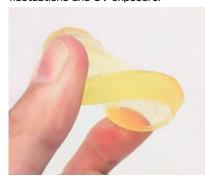


Flexiblity Two-Component

Two-component epoxy adhesive cures to flexible material.

Maintains Flexibility **After Curing**

Even after curing, it retains its flexibility after being left for two years under conditions involving temperature fluctuations and UV exposure.





Easy Mixing

Simply transfer the entire contents of the hardener into the min part bottle and mix — no measuring required. The mixture can be used directly from the bottle, minimizing mess and ensuring clean handling.



| Product Number | 4100MIGHTY | | |
|--------------------------------|--|---------------------------|--|
| | Base Resin | Hardener | |
| Applications | ●Support legs ●For areas requiring flexibility | | |
| Features | ●Applicable on wet surfaces ●Room temperature curing ●No measuring required ●Low-VOC / Low formaldehyde – JAIA F★★★ / 4-VOC standard | | |
| Appearance | Transparent | Yellow Brown, Transparent | |
| Color After Curing | Yellow, Transparent | | |
| Main Component | Modified epoxy resin | Modified polyamine | |
| Viscosity (mPa·s/25°C) | 1900 | 700 | |
| Specific Gravity (d 20/4) | 1.14 | 1.02 | |
| Mixing Ratio | 100 | :100 | |
| Pot Life at 25℃ | 40 | min | |
| Curing Time | 2, | 4h | |
| Tensile Shear Strength (N/mm²) | 5 | | |
| Hardness (Shore A) | 55 | | |
| Shelf Life | 1 year | | |
| Volume / Packaging | Base resin :10 Hardener:100 | | |

Made to order



Heat Resistance Two-Component

Room temperature curing epoxy adhesives with high heat resistance.

For Heat-Sensitive Areas Requiring Thermal Resistance

■ Heat and Chemical Resistance Heat resistance at 150°C.

Room Temperature Curing

No thermal curing or heating equipment required thanks to room-temperature curing.

Low Curing Shrinkage

Solvent free, virtually no shrinkage upon curing.



■ For Large or On-Site Bonding Without Heat

Examples include:

- · Vehicles, ships, and aircraft
- Ceramics
- · Tanks, ducts, and other piping systems · Electrical and electronic components

Heat Resistant Two-Component Epoxy Adhesive Clear Version

- Heat and Chemical Resistance Heat resistance at 150℃.
- Room Temperature Curing

No thermal curing or heating equipment required thanks to room-temperature curing.

Low Curing Shrinkage

Solvent free, virtually no shrinkage upon curing.

Low Viscosity

Its low viscosity makes it easy to apply and suitable for bonding large surface areas.

■ For Large or On-Site Bonding Without Heat

Examples include:

- · Vehicles, ships, and aircraft
- · Electrical and electronic components
- · Tanks, ducts, and other piping systems

No Continuous Adhesion Loss at 200°C

Heat and Chemical Resistance Heat resistance at 200℃.

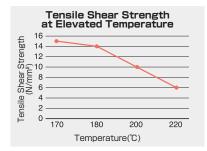
Room Temperature Curing

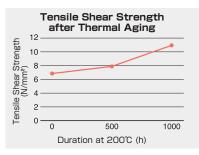
No thermal curing or heating equipment required thanks to room-temperature



Low Curing Shrinkage

Solvent free, virtually no shrinkage upon curing.





| Product Number | 3500 | | |
|---|-----------------------------|--------------------|--|
| | Base Resin | Hardener | |
| Appearance | Dark Green | Beige | |
| Color After Curing | Dark | Green | |
| Main Component | Modified epoxy resin | Modified polyamine | |
| Viscosity (mPa·s/25°C) | Paste | Paste | |
| Specific Gravity(d ²⁰ ₄) | 1.31 | 1.50 | |
| Mixing Ratio | 100:50 | | |
| Pot Life at 25℃ | 1h | | |
| Curing Time | 24h (RT) / 30min (80°C) | | |
| Tensile Shear Strength (N/mm²) | 20 (RT) / 11 (150°C) | | |
| Hardness (Shore D) | 83 | | |
| Shelf Life | 3 months | | |
| Volume / Packaging | 990g set Base resin 660g | - | |

Abbreviations : RT = Room Temperature

| Product Number | 3600 | | |
|--------------------------------|--|------------------------|--|
| | Base Resin | Hardener | |
| Appearance | Reddish Brown, Transparent | Yellow, Transparent | |
| Color After Curing | Dark Brown, | Transparent | |
| Main Component | Modified epoxy resin | Modified polyamine | |
| Viscosity (mPa·s/25°C) | 24000 | 1300 | |
| Specific Gravity(d 20/4) | 1.16 | 1.01 | |
| Mixing Ratio | 100:32 | | |
| Pot Life at 25℃ | 5h | | |
| Curing Time | 24h (RT) / 30min (80°C) | | |
| Tensile Shear Strength (N/mm²) | 17 (RT) / 11 (150℃) | | |
| Hardness (Shore D) | 80 | | |
| Shelf Life | 6months | | |
| Volume / Packaging | 1kg set Round can Base resin 758g Hardener 243g | | |

| Product Number | 3900■ | | |
|--------------------------------|---|-----------------------|--|
| | Base Resin | Hardener | |
| Appearance | Yellow, Transparent | Brown, Transparent | |
| Color After Curing | Dark Brown, | Transparent | |
| Main Component | Modified epoxy resin | Modified polyamine | |
| Viscosity (mPa·s/25°C) | 31000 | 3100 | |
| Specific Gravity(d $^{20}_4$) | 1.21 | 1.03 | |
| Mixing Ratio | 100:25 | | |
| Pot Life at 25℃ | 100min | | |
| Curing Time | 24h (RT) / 60min (80°C) | | |
| Tensile Shear Strength (N/mm²) | 14 (RT) / 10 (200°C) | | |
| Hardness (Shore D) | 80 | | |
| Shelf Life | 6months | | |
| Volume / Packaging | 1 kg set Round can Base resin 750g Hardener 250g | | |

Test method: In accordance with JIS K 6833 (1994). Made to order general test methods for adhesives In accordance with JIS K 6850 (1999), tensile shear adhesive strength testing method for adhesives and rigid substrates.





Standard Product One-Component

One-component epoxy adhesive for bonding various substrates.

■ For Bonding Various Substrates

Ideal for metal, glass, plastics.

■ Superior Properties with Mild Curing

With a recommended curing condition of 30 minutes at 100°C, this one-component epoxy adhesive cures under relatively mild conditions while offering excellent adhesion and thermal properties.

Low Halogen

The total chlorine and bromine content is less than 1500 ppm.





| Product Number | AY-5302 |
|--|-------------------------|
| Applications | General purpose bonding |
| Features | Standard product line |
| Specific Gravity (d ²⁰ ₄) | 1.2 |
| Curing Time | 30min (100°C) |
| Appearance | Gray |
| Viscosity (mPa·s) | 5000 |
| Hardness (Shore D) | 83 |
| Elastic Modulus (GPa) | 3.1 |
| Tg(℃) | 108 |
| Coefficient of Thermal Expansion (before Tg) (ppm) | 60 |
| Tensile Shear Strength (N/mm²) | 23 |
| Temperature Range (°C) | ~150 |
| Volume | 250g |
| Pot Life at 25℃ | 1 month |
| Storage Conditions | Frozen |

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



Low Temperature and Fast Curing One-Component

One-component thermal curing epoxy adhesive that cures at low temperatures and within a short curing time.

■ Low Temperature and Fast Curing

Short curing time dose not thermally damage bonding parts and surrounding components and materials.

Low Halogen

The total chlorine and bromine content is less than 1500 ppm. $\,$





| Product Number | AY-5231 | AY-5274 | AY-5404 |
|--|---|--|--|
| Applications | Camera module Heat sensitive devices | Camera module Heat sensitive devices | Camera module Heat sensitive devices Potting |
| Features | Low temperature and fast curing Low viscosity | Low temperature and fast curing Medium viscosity | Low temperature and fast curing High viscosity |
| Specific Gravity (d 20/4) | 1.2 | 1.2 | 1.5 |
| Curing Time | 20min (80°C) | 20min (80°C) | 15min (80°C) |
| Appearance | Black | Black | Black |
| Viscosity (mPa·s) | 1500 | 4000 | 10000 |
| Hardness (Shore D) | 75 | 78 | 71 |
| Elastic Modulus (GPa) | 3.7 | 3.4 | 7.8 |
| Tg(℃) | 45 | 56 | 43 |
| Coefficient of Thermal Expansion (before Tg) (ppm) | 55 | 70 | 40 |
| Tensile Shear Strength (N/mm²) | 25 | 21 | 22 |
| Temperature Range (°C) | ~150 | ~150 | ~150 |
| Volume | 250g | 250g | 250g |
| Pot Life at 25℃ | 1 O days | 10days | 1 O days |
| Storage Conditions | Frozen | Frozen | Frozen |

■ Made to order



Heat Resistance, High Strength One-Component

Thermal curing one-component epoxy resin adhesive for application requiring haet resistance and high strength, such as motor magnet bonding and electronic component potting.

■ Heat Resistance

High glass transition temperature (Tg) provides excellent heat resistance.

Superior Properties with Mild Curing

With high bonding strength and hardness, ideal for structural bonding and potting.





| Product Number | AY-5011 | AY-5259 |
|--|--|--|
| Applications | Motor magnet Potting | Automotive motor Epoxy wafer lens Encapsulation Potting |
| Features | High strength Heat resistance Ultra high viscosity | High Tg Heat resistance High hardness Low halogen |
| Specific Gravity (d ²⁰ ₄) | 1.2 | 1.5 |
| Curing Time | 60min (120°C) | 60min (120℃) |
| Appearance | Gray | Black |
| Viscosity (mPa·s) | 120000 | 6000 |
| Hardness (Shore D) | 87 | 91 |
| Elastic Modulus (GPa) | 2.4 | 8.4 |
| Tg(℃) | 155 | 191 |
| Coefficient of Thermal Expansion (before Tg) (ppm) | 65 | 35 |
| Tensile Shear Strength (N/mm²) | 29 | 15 |
| Temperature Range (°C) | ~180 | ~190 |
| Volume | 250g | 250g |
| Pot Life at 25℃ | 1 month | 1day |
| Storage Conditions | Frozen | Frozen |

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

■ Made to order



For Electronic Components and Devices One-Component

A one-component thermal curing epoxy adhesive suitable for applications requiring high environmental resistance and excellent mechanical properties, such as reinforcement of electronic components and circuits.

Properties Tailored to the Operating Conditions

Adhesive properties are tailored to the specific application, such as high reliability, high hardness, and flexibility.

Low halogen

The total chlorine and bromine content is less than 1500 ppm.





| Product Number | AY-5158 | AY-5455 | AY-5013 |
|--|-------------------------------|--|--|
| Applications | Reinforcement for IC chips | Adhesion Sealing of automotive electrical components | Piezoelectric (PZT) elements Flip chip bonding |
| Features | High reliability | High hardness | Flexible Stress release bonding |
| Specific Gravity (d ²⁰ ₄) | 1.7 | 1.5 | 1.2 |
| Curing Time | 10min (100℃) | 15min (110℃) | 15min (80℃) |
| Appearance | Black | Black | Translucent |
| Viscosity (mPa·s) | 20000 | 40000 | 1250 |
| Hardness (Shore D) | 79 | 95 | 50/80(Shore A) |
| Elastic Modulus (GPa) | 4.3 | 10 | 12MPa |
| Tg(°C) | 64 | 126 | 7 |
| Coefficient of Thermal Expansion (before Tg) (ppm) | 39 | 50 | 70 |
| Tensile Shear Strength (N/mm²) | 24 | 17 | 9 |
| Temperature Range (°C) | ~150 | ~150 | ~120 |
| Volume | 250g | 250g | 250g |
| Pot Life at 25°C | 1 day | 1 month | 1 Odays |
| Storage Conditions | Frozen | Frozen | Frozen |

■ Made to order





For Underfill One-Component

A one-component, thermal curing epoxy adhesive suitable for underfill and sidefill applications.

Low Temperature, Fast Curing

Short curing time dose not thermally damage bonding parts and surrounding components and materials.

Low Viscosity

Low viscosity applicable for underfill.

Low halogen

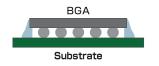
The total chlorine and bromine content is less than 1500 ppm.



Sidefill

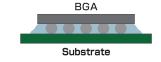
The adhesive capillary flows from the side of the electronic component.

After flowing, thermally cure.



Underfill

Resin penetrates between the electronic component and the PCB by capillary action and is thermally cured.



| Product Number | AY-5218C | |
|--|---------------------|--|
| Applications | Underfill, Sidefill | |
| Features | Low viscosity | |
| Specific Gravity (d ²⁰ ₄) | 1.2 | |
| Curing Time | 10min (100℃) | |
| Appearance | Black | |
| Viscosity (mPa·s) | 1250 | |
| Hardness (Shore D) | 70 | |
| Elastic Modulus (GPa) | 1.3 | |
| Tg(°C) | 36 | |
| Coefficient of Thermal Expansion (before Tg) (ppm) | 80 | |
| Tensile Shear Strength (N/mm²) | 20 | |
| Temperature Range (°C) | ~150 | |
| Volume | 250g | |
| Pot Life at 25℃ | 10days | |
| Storage Conditions | Frozen | |

Made to order

AY-4112

3000



Hybrid Curing One-Component

Combines the fast curing properties of light-curing adhesives with the high strength of epoxy resins.

Temporary Bonding by UV Curing

UV-induced temporary curing helps prevent adhesive flow during thermal curing and improves work efficiency.

Final Strength is Achieved **Through Thermal Curing**

Thermal curing enables the adhesive to reach its final strength, delivering the high bonding performance typical of epoxy resin adhesives.

Low halogen

The total chlorine and bromine content is less than 1500 ppm.

Shape Retention by UV Irradiation

Thermal curing only



Hybrid

Light Curing Acrylic Adhesive (Fast Curing)

Thermal Curing **Epoxy Adhesive** (Bond Strength, Low Out Gassing, High Reliability)

Applications Potting, Molding B-staged by UV energy Features and fully cured by heat. Specific Gravity (d²⁰₄) 12 **Curing Time** 100mW/cm2×10sec+1h (80°C) Appearance Pale Brown

Product Number

Viscosity (mPa·s)

Storage Conditions

Hardness (Shore D) 80 Elastic Modulus (GPa) 2.8 79/149 Tg(°C) Coefficient of Thermal Expansion (before Tg) (ppm) 80 Tensile Shear Strength (N/mm²) 17 Temperature Range (°C) ~150 250g

Made to order

Handling Precautions for Various Adheasives

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°C) 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 take precautions to avoid

and young children,



sunlight, as the adhesive may also cure under ultraviolet light.

Avoid exposure to direct



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

misuse.

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

of water immediately and consult

a physician as soon as possible.

Rinse thoroughly with plenty

In Case of Inhalation

If abnormal symptoms such as

itching occur due to inhalation

of fumes or vapor, seek medical



In Case of Ingestion

Do not induce vomiting. Seek medical attention



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 (CO2) 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

misuse.

attention immediately.



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

Keep out of reach of infants



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.



and young children, and take precautions to avoid

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.

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.

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

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.

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