

ALTECO

Industrial Adhesives Catalog

Perfecting the Power to Connect with a Single Drop

Quick × Strong
Epoxy Adhesives



Quick & Strong Epoxy Adhesives



Continuing challenge
in creating environmentally
and human friendly adhesive.

ALTECO epoxy adhesives deliver excellent performance, including high bond 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.

Excellent Bonds a wide range of substrates.
Adhesion
Excellent Excellent heat resistance, water resistance,
Durability weather resistance, and chemical resistance.
Electrical Does not conduct electricity
Insulation and provides excellent insulating properties.
Low Shrinkage Solvent free, virtually no shrinkage upon curing.
Compliant Compliant with various environmental regulations.
with Environmental For details, contact us.
Regulations

Skin Irritation Prevention

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

Repeated exposure may result in sensitization. Use with caution.

- (1) Use in a well-ventilated area. Wear safety goggles, glasses, masks, and gloves.
- (2) Clean the work area (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.



Epoxy Adhesives



Fast-Curing (Thixotropic) Two-Component

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

Fast-Curing

Fast-curing epoxy adhesives that cure in 5 or 30 minutes after mixing the base resin and hardener.

Thixotropic

Translucent and non-sagging.
Suitable for build-up and gap-filling applications.



Product Name	F-05		F-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	● 5 min curing ● Low VOC / Low Formaldehyde JAIA F★★★★ / 4VOC standard (Japan)		● 30 min curing ● Low VOC / Low Formaldehyde JAIA F★★★★ / 4VOC standard (Japan)	
Appearance	Milky White	White Translucent	Milky White	White Translucent
Color After Curing	Milky White		Milky White	
Main Component	Modified epoxy resin	Modified polythiol	Modified epoxy resin	Modified polythiol
Viscosity (mPa·s / 25°C)	Paste	Paste	Paste	Paste
Specific Gravity (d ₄ ²⁰)	1.16	1.13	1.20	1.20
Mixing Ratio	100 : 100		100 : 100	
Open Time (25°C)	3 min		20 min	
Curing Time	5 min		30 min	
Tensile Shear Strength (N/mm ²)	15		15	
Hardness (Shore D)	78		78	
Shelf Life	1 year		1 year	
Volume / Packaging	70g set Aluminum tube 1kg set Plastic laminated tube		45g set Aluminum tube 1kg set Plastic laminated tube	

Fast-Curing (Clear) Two-Component

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

Fast-Curing

Fast-curing epoxy adhesives that cure in 5 or 30 minutes after mixing the base resin and hardener.

Clear

Transparent formula that helps make bonded areas less noticeable.



Product Name	F-05C		F-30C	
	Base Resin	Hardener	Base Resin	Hardener
Applications	Suitable for transparent bonding applications. (Metal, Glass, Ceramics, Wood, Plastics)		Suitable for transparent bonding applications. (Metal, Glass, Ceramics, Wood, Plastics)	
Features	● 5 min curing ● Clear Version of F-05 ● Low VOC / Low Formaldehyde JAIA F★★★★ / 4VOC standard (Japan)		● 30 min curing ● Clear Version of F-30 ● Low VOC / Low Formaldehyde JAIA F★★★★ / 4VOC standard (Japan)	
Appearance	Transparent	Yellow Transparent	Transparent	Yellow Transparent
Color After Curing	Pale Yellow Transparent		Pale Yellow Transparent	
Main Component	Modified epoxy resin	Modified polythiol	Modified epoxy resin	Modified polythiol
Viscosity (mPa·s / 25°C)	15000	13000	15000	16000
Specific Gravity (d ₄ ²⁰)	1.17	1.13	1.17	1.14
Mixing Ratio	100 : 100		100 : 100	
Open Time (25°C)	3min		20min	
Curing Time	5min		30min	
Tensile Shear Strength (N/mm ²)	10		15	
Hardness (Shore D)	80		80	
Shelf Life	1 year		1 year	
Volume / Packaging	1kg set Plastic laminated tube		1kg set Plastic 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.

Epoxy Adhesives



For General Purpose Two-Component

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

Large-Area Application

Extended working time allows large-area application
and easy removal of excess adhesive.

Strong Bonding to a Wide Range of Materials

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



Product Name	6100	
	Base Resin	Hardener
Applications	General purpose bonding (Metal, Glass, Ceramics, Wood, Plastics)	
Features	● General purpose ● Room temperature curing ● Low VOC / Low Formaldehyde JAIA F★★★★ / 4VOC standard (Japan)	
Appearance	Transparent	Yellow Brown Transparent
Color After Curing	Yellow Transparent	
Main Component	Modified epoxy resin	Modified polyamide
Viscosity (mPa·s/25℃)	20000	40000
Specific Gravity (d ₄ ²⁰)	1.17	0.98
Mixing Ratio	100 : 100	
Pot Life at 25℃	1 h	
Curing Time	24 h	
Tensile Shear Strength (N/mm ²)	13	
Hardness (Shore D)	80	
Shelf Life	1 year	
Volume / Packaging	2 kgset Round metal can	

Cartridge Type Two-Component

Enables accurate measuring, mixing, and dispensing in one operation.

Improved Work Efficiency

Supplied in a 2-in-1 cartridge.
Mix and dispense using a cartridge gun.



The specialized dispensing gun is not included.

Product Name	MAZERUN52		MAZERUN300T	
	Base Resin	Hardener	Base Resin	Hardener
Applications	General purpose bonding (Metal, Glass, Ceramics, Wood, Stone, Concrete)		● For bonding and fixturing metal and wooden construction materials ● Bonding and repair of wheel stops, marble, bricks, concrete blocks ● Insulation bonding and fixturing of electrical components and magnets	
Features	● Room temperature curing ● Does not stain white stone ● Low VOC / Low Formaldehyde JAIA F★★★★ / 4 VOC standard (Japan)		● Room temperature curing ● Low VOC / Low Formaldehyde JAIA F★★★★ / 4 VOC standard (Japan)	
Appearance	White	Beige	White	Black
Color After Curing	Beige		Gray	
Main Component	Modified epoxy resin	Modified polyamine	Modified epoxy resin	Modified polythiol
Viscosity (mPa·s/25℃)	Paste	Paste	Paste	Paste
Specific Gravity (d ₄ ²⁰)	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 h		24 h	
Tensile Shear Strength (N/mm ²)	20		14	
Hardness (Shore D)	77		80	
Shelf Life	1 year		1 year	
Volume / Packaging	50ml Cartridge		300ml Cartridge	

Epoxy Adhesives



Heat Resistance Two-Component

Room temperature curing epoxy adhesives with high heat resistance.

For Heat-Resistant Applications Where Heat Curing Is Not Possible

■ 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-Scale or On-Site Bonding Without Heating

Examples include:

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



Product Name	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 ₄ ²⁰)	1.31	1.50
Mixing Ratio	100 : 50	
Pot Life at 25°C	1 h	
Curing Time	24 h (RT) / 30 min (80°C)	
Tensile Shear Strength (N/mm ²)	20 (RT) / 11 (150°C)	
Hardness (Shore D)	83	
Shelf Life	3 months	
Volume / Packaging	990g set Plastic jar Base resin 660g Hardener 330g	

Abbreviations : RT = Room Temperature

Clear Version of Heat-Resistant Two-Component Epoxy Adhesive

■ 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.

■ Low Viscosity

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

■ For Large-Scale or On-Site Bonding Without Heating

Examples include:

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



Product Name	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 ₄ ²⁰)	1.16	1.01
Mixing Ratio	100 : 32	
Pot Life at 25°C	5 h	
Curing Time	24 h (RT) / 30 min (80°C)	
Tensile Shear Strength (N/mm ²)	17 (RT) / 11 (150°C)	
Hardness (Shore D)	80	
Shelf Life	6 months	
Volume / Packaging	1kg set Round can Base resin 758g Hardener 243g	

Maintains Strength at 200°C

■ Heat and Chemical Resistance

Heat resistance at 200°C.

■ Room Temperature Curing

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

■ Low Curing Shrinkage

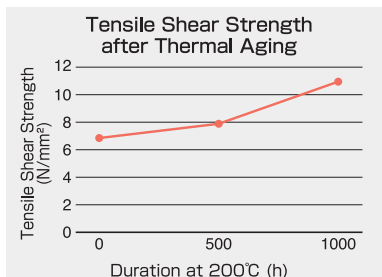
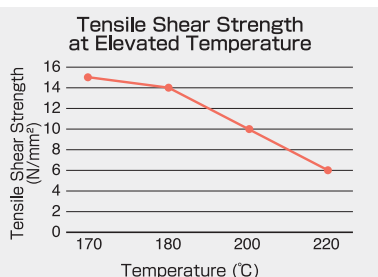
Solvent free, virtually no shrinkage upon curing.



Product Name	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 ₄ ²⁰)	1.21	1.03
Mixing Ratio	100 : 25	
Pot Life at 25°C	100 min	
Curing Time	24 h (RT) / 60 min (80°C)	
Tensile Shear Strength (N/mm ²)	14 (RT) / 10 (200°C)	
Hardness (Shore D)	80	
Shelf Life	6 months	
Volume / Packaging	1kg set Round can Base resin 800g Hardener 200g	

■ Made to order

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.



Epoxy Adhesives



For Molding Two-Component

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

High 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 Name	R-2007/H-1040		R-2007/H-2002	
	Base Resin	Hardener	Base Resin	Hardener
Applications	- Bonding, Molding, Potting, Coating - Small size molding - Molding of electronic components - Bonding of glass ornaments		- 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 (Japan)		- Gel after 24 h at RT, then elevated-temperature cure. - Low VOC / Low Formaldehyde JAIA F★★★★ / 4 VOC standard (Japan)	
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 ₄ ²⁰)	1.17	0.99	1.17	0.98
Mixing Ratio	100 : 40		100 : 40	
Pot Life at 25°C	45min		5h	
Curing Time	24 h		48 h	
Tensile Shear Strength (N/mm ²)	15		14	
Hardness (Shore D)	82		80	
Shelf Life	1year		1year	
Volume / Packaging	1.4kg set Plastic jar Base resin 1kg Hardener 400g		1.4kg set Plastic jar Base resin 1kg Hardener 400g	

Flexibility Two-Component

Two-component epoxy adhesive cures to a flexible material.

Maintains Flexibility After Curing

Even after curing, it retains its flexibility when exposed for two years to temperature fluctuations and UV radiation.



Easy Mixing

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



Product Name	4100 Mighty	
	Base Resin	Hardener
Applications	- Support legs - For Applications Requiring Flexibility	
Features	- Applicable to wet surfaces - Room temperature curing - No measuring required - Low VOC / Low Formaldehyde JAIA F★★★★ / 4 VOC standard (Japan)	
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 ₄ ²⁰)	1.14	1.02
Mixing Ratio	100 : 100	
Pot Life at 25°C	40 min	
Curing Time	24 h	
Tensile Shear Strength (N/mm ²)	5	
Hardness (Shore A)	55	
Shelf Life	1 year	
Volume / Packaging	200g set Plastic jar Base resin 100g Hardener 100g	

■ Made to order

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 Eye Contact

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



In Case of Inhalation

If abnormal symptoms such as symptoms such as irritation 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

Remove all sources of ignition 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.

Epoxy Adhesives



Standard Product **One-Component**

One-component epoxy adhesive for bonding various substrates.

■ For Bonding Various Substrates

Ideal for bonding metals, glass, and plastics.

■ Excellent Properties with Mild Curing Conditions

With a recommended curing condition of 30 min 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 Name	AY-5302 ■
Applications	General purpose bonding
Features	Standard Product
Specific Gravity (d_{4}^{20})	1.2
Curing Time	30 min (100°C)
Appearance	Gray
Viscosity (mPa·s)	5000
Hardness (Shore D)	83
Elastic Modulus (GPa)	3.1
Tg (°C)	108
Coefficient of Thermal Expansion (before Tg) (ppm)	60
Tensile Shear Strength (N/mm ²)	23
Temperature Range (°C)	~150
Volume	250g
Pot Life at 25°C	1 month
Storage Conditions	Frozen

Low Temperature and Fast Curing **One-Component**

One-component heat-curing epoxy adhesive that cures at low temperatures in a short time.

■ Low-Temperature, Fast-Curing

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

■ Low-Halogen

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



Product Name	AY-5231 ■	AY-5274 ■	AY-5404 ■
Applications	Camera modules Heat-sensitive devices	Camera modules Heat-sensitive devices	Camera modules Heat-sensitive devices Potting
Features	Low viscosity	Medium viscosity	High viscosity
Specific Gravity (d_{4}^{20})	1.2	1.2	1.5
Curing Time	20 min (80°C)	20 min (80°C)	15 min (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 (°C)	45	56	43
Coefficient of Thermal Expansion (before Tg) (ppm)	55	70	40
Tensile Shear Strength (N/mm ²)	25	21	22
Temperature Range (°C)	~150	~150	~150
Volume	250g	250g	250g
Pot Life at 25°C	10 days	10 days	10 days
Storage Conditions	Frozen	Frozen	Frozen

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

■ Made to order



Epoxy Adhesives

Heat Resistance, High Strength **One-Component**

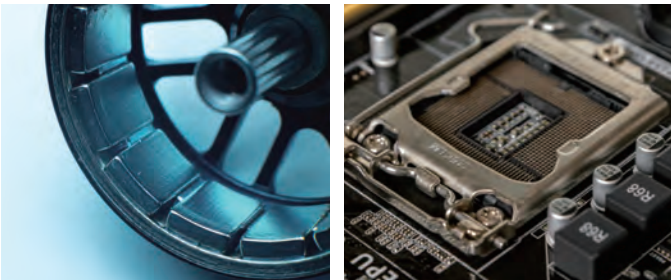
Thermal curing one-component epoxy resin adhesive for applications requiring heat resistance and high strength, such as motor magnet bonding and potting of electronic components.

■ Heat Resistance

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

■ Superior Properties under Mild Curing Conditions

Offers high bond strength and hardness, making it ideal for structural bonding and potting.



Product Name	AY-5011 	AY-5259 
Applications	Motor magnets Potting	Automotive motors Epoxy wafer lens Encapsulation Potting
Features	High strength Ultra high viscosity	High T _g High hardness Low halogen
Specific Gravity (d ₄ ²⁰)	1.2	1.5
Curing Time	60 min (120°C)	60 min (120°C)
Appearance	Gray	Black
Viscosity (mPa·s)	120000	6000
Hardness (Shore D)	87	91
Elastic Modulus (GPa)	2.4	8.4
T _g (°C)	155	191
Coefficient of Thermal Expansion (before T _g) (ppm)	65	35
Tensile Shear Strength (N/mm ²)	29	15
Temperature Range (°C)	~180	~190
Volume	250g	250g
Pot Life at 25°C	1 month	1 day
Storage Conditions	Frozen	Frozen

For Electronic Components and Devices **One-Component**

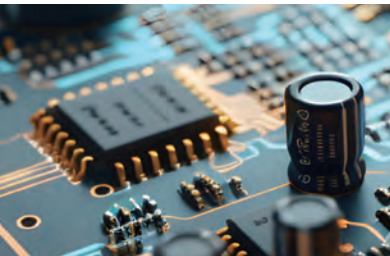
A one-component thermal curing epoxy adhesive suitable for applications requiring high environmental resistance and excellent mechanical properties, such as reinforcement of electronic components and circuits.

■ Properties Tailored to Application Requirements

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 Name	AY-5158 	AY-5455 	AY-5013 
Applications	Reinforcement for IC chips	Bonding and sealing of automotive electrical components	Piezoelectric (PZT) elements Flip chip bonding
Features	High reliability	High hardness	Flexible Stress relief bonding
Specific Gravity (d ₄ ²⁰)	1.7	1.5	1.2
Curing Time	10 min (100°C)	15 min (110°C)	15 min (80°C)
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
T _g (°C)	64	126	7
Coefficient of Thermal Expansion (before T _g) (ppm)	39	50	70
Tensile Shear Strength (N/mm ²)	24	17	9
Temperature Range (°C)	~150	~150	~120
Volume	250g	250g	250g
Pot Life at 25°C	1 day	1 month	10days
Storage Conditions	Frozen	Frozen	Frozen

 Made to order

Epoxy Adhesives



For Underfill **One-Component**

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

■ Low Temperature, Fast Curing

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

■ Low Viscosity

Low viscosity suitable for underfill applications.

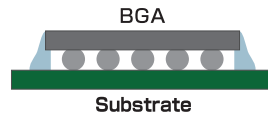
■ Low-Halogen

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



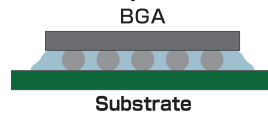
Sidefill

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



Underfill

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



Product Name	AY-5218C ■
Applications	Underfill, Sidefill
Features	Low viscosity
Specific Gravity (d_{4}^{20})	1.2
Curing Time	10 min (100°C)
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/mm ²)	20
Temperature Range (°C)	~150
Volume	250g
Pot Life at 25°C	10 days
Storage Conditions	Frozen

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.

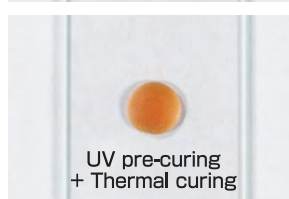
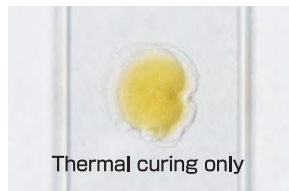
■ Final Strength is Achieved Through Thermal Curing

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

■ Low-Halogen

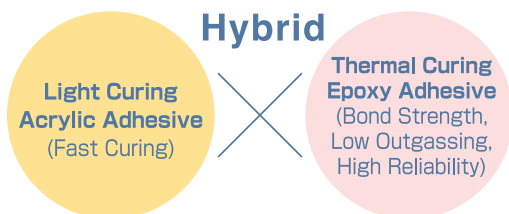
The total chlorine and bromine content is less than 1500 ppm.

● Shape Retention by UV Irradiation



Product Name	AY-4112 ■
Applications	Potting, Molding
Features	B-staged by UV irradiation and fully cured by heat.
Specific Gravity (d_{4}^{20})	1.2
Curing Time	100mW/cm ² × 10 s + 1 h (80°C)
Appearance	Pale Brown
Viscosity (mPa·s)	3000
Hardness (Shore D)	80
Elastic Modulus (GPa)	2.8
Tg (°C)	79/149
Coefficient of Thermal Expansion (before Tg) (ppm)	80
Tensile Shear Strength (N/mm ²)	17
Temperature Range (°C)	~150
Volume	250g
Storage Conditions	Frozen

■ Made to order



Precautions for Use

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 your hands thoroughly and rinse your mouth well 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.

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