



## Thermal Stability Acrylic Adhesive for PP, PE, TPO Inert Plastics

### Product Description

KA006 is two-component acrylic adhesive that can cure at 14~34 °C. No special surface treatment is required. Cured product exhibits excellent adhesion strength to many low surface energy materials, such as polypropylene (PP), polyethylene (PE), and thermoplastic polyolefin (TPO). In a long-term high temperature environment (high temperature of 80°C / 14days), the adhesion strength will not obviously decline. It can replace screws, rivets, plastic welding and two-step processes, including chemical etchants, primers or surface treatments in many applications.

### Features

1. Mixed product exhibits excellent operability.
2. This product exhibits adhesion strength for different substrates.
3. This product exhibits excellent high temperature resistance, chemical resistance and water resistance.
4. This product can professionally solve thermoplastic polyolefin elastomer(TPO) structural adhesion problem.
5. Difficult bonding substrates do not require any surface treatments.
6. This product is solvent-free formula, low odor, completely complies to the environmental protection requirements.
7. This product offers excellent thermal stability.
8. This product complies to the 2011/65/EU RoHS regulations.
9. This product complies to chlorine < 900ppm, bromine < 900ppm, chlorine + bromine < 1500ppm.

### Typical Uncured Properties

	KA006A	KA006B
Appearance	Liquid	Liquid
Color	Blue	Light yellow
Viscosity 25°C, cps	250~400	12,000~13,000
	S14 100rpm	S14 100rpm
Thixotropic Index	2.0~3.0	3.5~4.5
Specific Gravity	1.16~1.31	1.02~1.12

### Typical Curing Properties

Mix Ratio (A : B) by Weight	10 : 1
Mix Ratio (A : B) by Volume	10 : 1
Pot Life, 25~33°C, 0.5g, min	8~10
Initial Strength Cure Time, 25~33°C, hr	1.0~1.5
Through Cure Time, 25~33°C, hr	18~24

### Direction of Use

1. When using this product, discard the front end of the A part and B part mixed adhesive, then coating the product (A part and B part mixed adhesive) on the substrate to achieve the best bonding performance.
2. It should be applied to a clean surface which is free of dirt, grease or mold release. In many cases, a simple solvent wipe is sufficient.
3. Mix thoroughly by weight 10 : 1 before use.

4. After mixing, it should be used within the pot life.
5. For maximum bonding strength apply adhesive evenly to both surfaces to be jointed.
6. The handling information of this product supplied in dual syringe cartridge can be obtained by requesting a copy of "Introduction for Adhesive Cartridge Dispenser(F-06122201)".

### Typical Cured Properties\*

Glass Transition Temp., (MDSC), °C	90
Specific Gravity	1.27
Durometer Hardness, Shore D	60
Shear Strength, PP+PP, kgf/cm <sup>2</sup>	45
Shear Strength, PP+PP, 80°C*336hr, kgf/cm <sup>2</sup>	46
Shear Strength, PA+PA, kgf/cm <sup>2</sup>	40
Shear Strength, HDPE+HDPE, kgf/cm <sup>2</sup>	58
Shear Strength, HDPE+HDPE, 70°C*168hr, kgf/cm <sup>2</sup>	52
Shear Strength, HDPE+HDPE, 70°C Water*168hr, kgf/cm <sup>2</sup>	50
Shear Strength, HDPE+HDPE, 5% Brine*168hr, kgf/cm <sup>2</sup>	60
Shear Strength, HDPE+HDPE, 70°C*5% Brine*168hr, kgf/cm <sup>2</sup>	60
Shear Strength, HDPE+HDPE, 10% Sodium hydroxide*168hr, kgf/cm <sup>2</sup>	62
Shear Strength, HDPE+HDPE, Gasoline*168hr, kgf/cm <sup>2</sup>	19
Shear Strength, HDPE+HDPE, Diesel Fuel*168hr, kgf/cm <sup>2</sup>	60
Shear Strength, HDPE+HDPE, Toluene 168hr, kgf/cm <sup>2</sup>	< 10
Shear Strength, HDPE+HDPE, Acetone*168hr, kgf/cm <sup>2</sup>	< 10
Low Temperature Shear Strength, HDPE+HDPE, -30°C, kgf/cm <sup>2</sup>	45
Room Temperature Shear Strength, HDPE+HDPE, 25°C, kgf/cm <sup>2</sup>	45
High Temperature Shear Strength, HDPE+HDPE, 50°C, kgf/cm <sup>2</sup>	45
High Temperature Shear Strength, HDPE+HDPE, 80°C, kgf/cm <sup>2</sup>	45
Shear Strength, PE+PE, kgf/cm <sup>2</sup>	40
Shear Strength, UHMWPE+UHMWPE, kgf/cm <sup>2</sup>	34
Shear Strength, LDPE+LDPE, kgf/cm <sup>2</sup>	25
Shear Strength, ABS+ABS, kgf/cm <sup>2</sup>	120
Shear Strength, PC+PC, kgf/cm <sup>2</sup>	120
Shear Strength, PMMA+PMMA, kgf/cm <sup>2</sup>	100
Shear Strength, PVC+PVC, kgf/cm <sup>2</sup>	140
Shear Strength, FRP+FRP, kgf/cm <sup>2</sup>	150
Shear Strength, PTFE+PTFE, kgf/cm <sup>2</sup>	< 20
Shear Strength, PS+PS, kgf/cm <sup>2</sup>	45
Shear Strength, Glass+Glass, kgf/cm <sup>2</sup>	60
Shear Strength, TPO+TPO, kgf/cm <sup>2</sup>	45

### Storage and Shelf Life

This product should be stored in cool and dark place. This product should be kept without any possibility of sunlight or ultraviolet exposure. Replace the lid immediately after use. Please keep the bottleneck clean. Keep without any possibility of acid-base substance after opened. Shelf life of this product is 1 year when stored at 2~13°C in the original and unopened containers.

## **Caution**

Some findings indicate a lack of potential for carcinogenicity with the compositions of this product by long term recurrent application to the skin. However, contact with skin is likely to produce mild transient reddening. It is important to remove adhesive from skin with soap and water thoroughly. DO NOT use solvents for cleaning hands. This product is of moderate acute toxicity by swallowing. If swallowed, call a physician. Avoid contact with eyes. In case of contact, flush with water for at least 15 minutes and get medical attention immediately. For specific information on this product, consult the Safety Data Sheet.

The data contained in this bulletin is provided only as a guide for evaluation/consideration. These material characteristics are typical properties that are based on a limited number of samples tested in the laboratory. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any product or method. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide.