Technical Data Sheet

KA 003

Room Temperature Cured Adhesive for PP Material

Product Description

KA003 is a two-component acrylic-based adhesive that can cure at $14 \sim 34$ °C. No additional surface treatment is required. Cured product exhibits excellent adhesion strength to many low surface energy substrates, such as polypropylene (PP), polyethylene (PE), and thermoplastic polyolefin (TPO). It can replace screws, rivets, plastic welding and two-step process, including chemical etchants, primers or surface treatments in many applications.

Features

- 1. This product after mixing exhibits outstanding operability.
- 2. This product offers adhesion strength to different substrates.
- 3. This product exhibits structurally adhesion for Thermoplastic Polyolefin.
- 4. This does not require any surface treatments.
- This product exhibits excellent chemical resistance and water resistance.
- 6. This product complies to the 2011/65/EU RoHS regulations.

Typical Uncured Properties

	KA003A	KA003B
Appearance	Liquid	Liquid
Color	Milky	Light yellow
Viscosity 25°C,	34,000~55,000	45,000~57,000
S14, 10rpm, cps		
Specific Gravity	1.06~1.21	1.02~1.12

Typical Curing Properties

Mix Ratio (A: B) by Weight	9.1:1
Mix Ratio (A : B) by Volume	10:1
Pot Life, 25~33°C, min	4~6
Initial Cure Time, 25~33°C, hr	2~3
Thorough Cure Time, 25~33°C, hr	24~48

Direction of Use

- 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.
- 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 9.1: 1 before use.
- 4. After mixing, it should be used within the pot life.
- For maximum bonding strength apply adhesive evenly to both surfaces to be jointed.
- 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*

Shear Strength, kgf/cm ²	50
Glass Transition Temp.,(MDSC)°C	-10
Durometer Hardness, Shore D	60~65
Specific Gravity	1.20
Degradation Temp. 5wt% (TGA 10°C /min), °C	228~229

^{*} Specimen Cure Condition: 25~33 °C

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. After opened, keep the bottleneck clean and avoid any contact with acid-base substance. Shelf life of this product is 1 year when stored at 14~34°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.

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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.