Technical Data Sheet

KA 023

Two-component Room Temperature Curing Adhesive

Product Description

KA023 is a two-component acrylic-based adhesive cured at room temperature. This product cures at room temperature to exhibit excellent bonding strength. It is highly suitable for bonding dissimilar materials such as metals and glass substrates (e.g., stainless steel, carbon steel, aluminum, polyester fibers, etc.). It is ideal for various applications, including electronic components, automotive parts, high-end accessories, etc.

Features

- 1. This product exhibits good handling properties after mixing.
- 2. This product can cure at room temperature or be accelerated with heat for faster curing.
- This product exhibits balanced adhesive properties, including tensile strength, peel resistance, and impact resistance after mixing.
- 4. Excellent chemical resistance/water resistance.
- 5. This product complies to chlorine < 900ppm, bromine < 900ppm, chlorine + bromine < 1500ppm.

Typical Uncured Properties

	KA023A	KA023B
Appearance	Liquid	Liquid
Color	Dark green	Brown
Viscosity 25°C,	$\geq 10,000$	\ge 8,000
S14 10 rpm cps		
Specific Gravity	1.01~1.15	1.02~1.12
Thixotropic Index	$\geqq 2.5$	$\geqq 2.5$

Typical Curing Properties

Mix Rate (A: B) by Volume	1:1
Mix Ratio (A : B) by Weight	1:1
Pot Life, 25~33°C, min	5~10
Initial Cure Time, 25~33°C, hr	2~4
Full Cure Time 25~33°C hr	12~24

Direction of Use

- Take this product from the refrigerated environment and let it sit at room temperature (14~34°C) for 2 to 4 hours. Then, discard the front end of the A part and B part mixed adhesive, then coat 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 free of dirt, grease, or mold release. In many cases, a simple solvent wipe is sufficient.
- 3. Mix thoroughly by volume 1: 1 or weight 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.
- 6. The handling information of this product supplied in a 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 Durometer Hardness, Shore D Specific Gravity Shear Strength*1, Al vs. Al, kgf/cm² Shear Strength*1, Cu vs. Cu, kgf/cm²	104 70 1.1 130 120
Shear Strength*1, Blasted Steel vs. Blasted Steel, kgf/cm ²	150
Shear Strength*1, Stainless Steel vs. Stainless Steel, kgf/cm ²	230
Shear Strength*1, Glass vs. Glass, kgf/cm ²	110
Degradation Temp. 5wt% (TGA 10°C /min),	184
Weight Loss Ratio@100°C, %	1.76
Weight Loss Ratio@150°C, %	3.57
Weight Loss Ratio@180°C, %	4.81
Weight Loss Ratio@200°C, %	5.72
Weight Loss Ratio@250°C, %	8.23

^{*}Specimen Cure Condition: Room temperature (25~33°C / 18~24 hr)

Storage and Shelf Life

This product should be kept without any possibility of light exposure. Replace the lid immediately after use. Please keep the bottle mouth clean and avoid any contact with acid-base a substance after opening. This product has a one-year minimum shelf life when stored in a dark place below 2~13°C in original, unopened containers.

Caution

Some findings indicate a lack of potential for carcinogenicity with the compositions of this product due to long-term recurrent application to the skin. However, contact with skin is likely to produce mild transient reddening. Removing adhesive from the skin thoroughly with soap and water is important. DO NOT use solvents for cleaning hands. This product is of moderate acute toxicity when swallowed. 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 Material Safety Data Sheet

Update: 2024-11-18

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.