



# Adhesive

## NF-1015-10

GBA

### Low Volatile Silicone Sealing Adhesive

#### Product Features

- Single component – room temperature (moisture) curing
- Silicone rubber substrate
- Tin free
- Excellent sealing performance
- High elasticity and softness
- Low volatility, low oil permeability
- Can maintain good reliability even under low voltage conditions
- High temperature and moisture resistance
- Does not contain acidic or alkaline agents

#### Product Application

- Applied for sealing or bonding of automotive components and photovoltaic products, such as junction boxes and aluminum frames.
- General sealing or bonding of various electrical components.

#### SPECIFICATIONS TABLE

Item	Unit	NF1015-10	Test Standard
appearance	–	Black/White/Grey	visual
Type of resin	–	Single component silicon-based	–
Extrusion rate (55cc, 1.5mm nozzle @60psi)	g/min	10±2	GoodBon
Surface drying time	min	10~20	GoodBon
Basic curing time	hr	2~4	GoodBon
Curing speed	mm/24h	≥2.0	GoodBon
density	g/cm <sup>3</sup>	1.5	ASTM D792
hardness	Shore A	35±5	ASTM D2240
tensile strength	MPa	≥1.8	ASTM D412
Elongation at break	%	≥300	ASTM D412
Shear strength (aluminum)	MPa	≥2.0	ASTM D1002
volume resistivity	Ω-cm	≥1.0×10 <sup>14</sup>	ASTM D257
compressive strength	kV/mm	≥15	ASTM D149
Flame retardant rating	–	HB	UL94
Working temperature range	° C	-60~200	GoodBon
RoHS	–	Yes	GoodBon

#### Packaging

- available in 300cc syringe and 300cc cartridge

#### Storage and Shelf Life

- Store in a cool, dry, sealed environment at temperatures between -20°C and 30°C
- Shelf life: 6 months

## Instructions for Use

### • Surface Preparation

Thoroughly clean the bonding surface using sandpaper or solvents such as toluene or xylene to remove rust, oil, dust, and other contaminants that may affect adhesion. Exercise caution when using solvents on plastic materials, as some solvents may damage certain plastic surfaces.

### • Application

Load NF1015-10 into the FIP dispensing machine. Select an appropriate dispensing needle size for your application. Dispense the adhesive and immediately align and press the bonding surfaces together before the adhesive surface begins to dry.

### • Product Handling After Opening

It is recommended to use the product completely once opened. If any material remains, seal the container tightly using the removed nozzle tip and store at room temperature for a few days.

## Storage Precautions

NF1015-10 reacts with moisture in the air and begins to cure on the surface. The curing speed may vary depending on environmental temperature and humidity.

Note: If humidity exceeds 100% and water droplets form on the adhesive, hydrolysis may occur before crosslinking begins, weakening the cured product and inhibiting full curing.

During the curing process, electrical insulation properties may temporarily decline. However, in most cases, the material will regain its full insulation performance once fully cured.

Avoid contact with solder or certain materials that may inhibit curing.

Do not cure the product in completely enclosed areas using condensation methods.

Ensure all bonding surfaces are clean and free from moisture, oil, and contaminants. Primers may be required for certain substrates to improve adhesion.

## Safety and Hygiene Guidelines

- Use NF1015-10 in a well-ventilated area, as methanol gas is released during curing. If discomfort occurs, move to an area with fresh air.
- Uncured material may irritate skin and mucous membranes. Avoid prolonged skin contact and prevent eye contact.
  - In case of eye contact: Rinse immediately with water for at least 15 minutes and seek medical attention.
  - For skin contact: Wipe off with a dry cloth and wash the area with soap and water.
- Individuals wearing contact lenses should take extra precautions, as uncured adhesive may cause lenses to adhere to the eyes.
- Avoid touching your eyes during use. Wear protective equipment such as safety glasses.
- Keep out of reach of children.