



## Moisture Curing Modified Silicone Adhesive

### Product Description

FS115BL6 is moisture curing modified silicone adhesive for plastics, metals and glass bonding. This product is cured by the moisture in the air. The curing system of this product is alkoxy. It is not stinky and has fast curing properties. This resin is different from the traditional PU which contains isocyanate. This product has better adhesion strength than silicone type products. It is well suited for electronic devices casting and bonding.

### Features

1. This product is used for various substrates bonding.
2. This resin has flexible properties and absorb fracture energy.
3. This product has stable properties in a wide range of temperature.
4. This product does not volatilize low molecular weight siloxane compounds. It will not pollute the electronic devices.
5. This resin is one component product without mixing. It is easy to use.
6. This product has stable properties and is able to storage in the room temperature.
7. This resin will fast cure in the air. It can have surface dryness in a short time.
8. This product complies to the 2011/65/EU RoHS regulations.

### Typical Uncured Properties

	FS115BL6
Composition	Polyether resin
Appearance	Liquid
Color	Black
Viscosity*25°C, S14 10rpm, cps	400,000~750,000
Thixotropic Index	> 3
Specific Gravity	1.27
Solvent Content, %	0

\*This value is for reference. Please refer to COA for the actual value.

### Typical Curing Properties

Surface Dry Time, (26±1 °C, 57±5 %RH) ,min	5
Surface drying time , min	7~10

### Direction of Use

1. 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.
2. Pour or brush this product onto the substrates, it does not recommend to stir to avoid interfusing the air. This product will be cured with the air. The curing properties depend on its thickness, curing temperature and relative humidity.

3. After bonding, do not move the substrate for one to two hours. It can be fixed after twelve to twenty-four hours. If the layer is thick, the initial curing time will be longer. If it does not need any adhesion strength, it can be bond right after applying the adhesive when the small area bonding.
4. Use this product as soon as possible after opening the original packages. When not using, please replace the lid tightly and store in a cool and dry place.
5. Cure time on the really part will depend upon factors such as part geometry, materials to be bonded, bondline thickness and humidity. Cure schedule should be confirmed with actual production parts and equipment.

### Typical Cured Properties

Hardness (Durometer) ASTM D2240-03, Shore A	50
Young's modulus, MPa	1.84
Elongation, %	204
Surface Resistivity, Ω	1.9*10 <sup>12</sup>
Volume Resistivity Ω ·cm	2.0*10 <sup>11</sup>
Glass Transition Temp., °C	< -40

### Lap Shear Strength (kgf/cm<sup>2</sup>)

Al vs Al	27
SUS vs SUS	26
Cu vs Cu	40
PC vs PC	13
PVC vs PVC	30
PET vs PET	14
PMMA vs PMMA	27
ABS vs ABS	9
PA vs PA	22

### Curing Depth

Test Conditions: 30 °C, 50% RH in PP container

Time (Day)	Curing Depth (mm)
1	2.6
2	3.2
3	3.8
7	5.7

## **Storage and Shelf Life**

This product should be kept without any possibility of moisture exposure. Replace the lid immediately after use. Shelf life of this product is six months when stored in dark place below 14~34°C in original, 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 Material 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 or 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.