EVERWIDE
Everwide Chemical Co.
http://www.everwide.com.tw/
No. 36, Dougong 6th Rd., Douliu City,
Yunlin County 64069, Taiwan
Tel:(886)5-557-4717
Email: service@everwide.com.tw

Technical Data Sheet

FX 174W1

Silicone for Potting

Product Description

FX174W1 is two-component silicone adhesive, and the mixing ratio A:B=10:1, it is mainly used in deep potting. This product has good leveling and defoaming properties, and it can bonding with metals and plastics, such as aluminum and PC. After AB is mixed, it can be cured deeply by the humidity in the environment, and the reaction rate can reach more than 90% after one day.

Features

1. Good impact resistance and shock resistance.
2. Flexibility after curing.
3. Good yellowing resistance and weather resistance.
4. Temperature resistance range is -45~200 °C.
5. Curing quickly at room temperature.
6. Good leveling and good surface drying.
7. It can bonding with metals and general plastics.
8. It can be used for potting with thickness of more than 2 cm.
9. It is harmless to the environment and human.
10. This prodcut complies to the 2011/65/EU RoHS regulations.

Typical Uncured Properties

	FX174W1A	FX174W1B
Composition	Polysiloxane resin	Hardener
Appearance	Liquid	Liquid
Color	White	Light yellow
Viscosity*25°C, cps	10,000~30,000 S14 10rpm	< 50 S21 100rpm
Specific Gravity@25°C	1.12	0.98

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

Typical Curing Properties

Mix Ratio (A : B)	10 : 1
Pot Life, 25°C, hr	1
Surface Dry Time, 25°C, hr	8
Thoroughly Cured Time, 25°C, days	3

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. Mix this product evenly and centrifuge to defoam, and pour or brush this product onto the substrates. This product will be cured with the air. The curing propeties depend on its thickness, curing temperatrue and relative humidity.
3. This product needs to avoid vacuum pumping for a long time to avoid affecting the original characteristics of the product. The vacuuming and defoaming time should not exceed 5 minutes.
4. Applications with thicker thickness, such as potting. Sometimes the bottom does not dry, because the resin at the bottom has less contact with moisture. In this case, it is usually necessary to extend the curing time to allow moisture to slowly diffuse from the surface to the bottom. Another way to solve the problem of non-drying at the bottom is to infuse in two times: the first time the resin is poured to half the height, and when the surface is almost dry and there is a slight sticky, then start second time potting.
5. Use this product as soon as possible after opening the original packages. When not using, please replace the rid tightly and store in a cool and dry place.
6. Cure time on the really part will depend upon fators such as part geometry, materials to be bonded, bondline thickness and humidity.
7. Cured product will not be harmful to human when it contacts with the skin.

Typical Cured Properties

Hardness (Durometer) ASTM D2240-03, Shore A	40
Hardness (Durometer) ASTM D2240-03, Shore 00	85
Water Absorption Ratio (25°C /24hr), %	0.03
Elongation, %	150
Shear Strength, Al vs. Al, kgf/cm^2	17
Shear Strength, PC vs. PC, kgf/ cm^2	13
Shear Strength, Al vs. PC, kgf/ cm^2	14
Temperature Range, °C	-45~200
Storage time@14~34 °C, months	6

Storage and Shelf Life

The container should be stored in cool and dark place. Avoid to contacting with moisture. Replace the lid immediately after using to keep away from any moisture. Shelf life of this product is twelve moths when stored 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.