

Co. Web1 : http://www.hs-epoxy.com

Wh2: http://www.epoxy-c.com/

# WL-700A/B Epoxy Resin

I Description

WL-700A/B is heat-cured encapsulating epoxy resin. They consist of main agent, curing agent and DF-090 light diffusing agent. The main compositions are electronic class low viscosity epoxy resin, additive, acid anhydride, and light diffusing filler. Following are their main features:

## 1. Low mixing viscosity, good degassing characteristics.

- 2. long pot life at room temperature, rapidly curing at medium temperature.
- 3. Outstanding mechanical, physical properties and low shrinkage rate after curing.
- 4. Good transparency after curing.

## II .Product data

Item	Test method or condition	WL-700A	WL-700B
Appearance	Visual inspection	Light purple liquid	Colorless liquid
Density	$25^{\circ}$ C g/cm <sup>3</sup>	1.1-1.2	1.1-1.2
Viscosity	40°C cPs	800-1300	30-50
Shelf life	Room temperature, ventilation	1 year	1 year

# III. Working condition

Item	Unit or condition	WL-700A/B
Mixing proportion	Ratio of weight	100:95-100
Application time period	25°C,35g,h	>4
Curing condition	°C/h	75-80/7-8

1. Recommended quantity(in weight)of diffusing agent and color paste to be used with WL-700A/B:

PC-002	2-5%
PC-003	1-3%
PC-004	2-4%
Diffusing a	gent 2-5%

- 2. Before use, WL-700A is to be pre-warmed to 50°C, then add WL-700B in mixing ratio and mix them thoroughly.
- 3. The mixture (A+B)is to be vacuum degassed at 3 torr and 40°C. When the liquid level sinks for 10-15 minutes stop degassing.
- 4. If possible encapsulation should be carried out in vacuum.





\_]



5. If light-diffusing agent DF-090 or color paste is to be used, the quantity of material B has to be increased to an amount of one half of the quantity of DF-090 or color paste.

## **IV**.Applications

Suitable for display panel and opto-electronic elements.

## V.Characteristics after curing

Items	Unit or condition	WL-700A/B
Hardness	Shore-D	>88
Volume resistivity	$25^{\circ}$ C, $\Omega \cdot cm$	>10 <sup>15</sup>
Surface resistance	25°C,Ω	$> 10^{14}$
Insulation strength	25°C,KV/mm	>23
Linear expansion coefficient	cm/cm/°C	<6.0×10 <sup>-5</sup>
Water absorption	100°C/1h,%	<0.4
Tg value	°C	>100

VI.Storage, transportation and points to note

- 1. This product does not belong to dangerous article. It can be stored and transported in the way as common chemicals do. The shelf life is designated in the container.
- 2. Take precise note of the type of the product, put it in place properly. Weigh it precisely and make a thoroughly mixing.
- 3. Material B is liable to absorb moisture, the lid of the container must be tightly covered after use.

## VII.Packing

Packed in 5-kg plastic container 20kgs/box.

 $\acute{U}$  Note: The data above are typical tested at a relative humidity of 70 % and a temperature of 25°C. They are just for customers' reference. We cannot wholly guarantee all the listed data will be reached under specific test conditions. When applying the product, the customers should use data obtained through their own testing.