GLT 1086

One-component Environmentally Friendly Solvent-free Varnish

INTRODUCTION

GLT 1086 is a solvent free organic resin. Cured product offers high gloss, high hardness, weather resistance and corrosion protection. Besides, it also has thermal resistance, good dielectric properties and electronic insulation. This product is able to be applied by dipping, spraying, coating or dispensing.

FEATURES

- This product1 can be used for impregnation of electronic parts and exhibits excellent insulation and moisture resistance.
- This resin is suitable for most of ink, coating and adhesive to increase the gloss and adhesion of ink, coating and adhesive.
- This product has good dielectric properties and electronic insulation. It is good for machine devices protection.
- This resin offers good corrosion protection and weather resistance.
- This product complies to chlorine < 900ppm, bromine < 900ppm, chlorine + bromine < 1500ppm.
- This product complies to the 20 11/65/EU RoHS regulations.

TYPICAL UNCURED PROPERTIES

PROPERTIES	GLT 1086
Appearance	Liquid
Color	Light yellow opaque
Viscosity 25°C, S21 20rpm, cps	300~800
Specific Gravity	1.16
Non-volatile content, %	100

TYPICAL CURING PROPERTIES

PROPERTIES	
Pot Life 25°C, days	14
Gel Time 130°C, min	5
Through Cure Time 130° C, min	40
Through Cure Time 150° C, min	30

TYPICAL CURED PROPERTIES

Glass Transition Temp., (DSC) °C	**140**
Durometer Hardness, Shore D	86
Specific Gravity	1.23
Water Absorption Ratio (25°C / 24hr), %	0.05
Water Absorption Ratio (80°C / 24hr), %	0.24
Water Absorption Ratio (97°C / 1.5hr), %	0.11
Weight Loss Ratio @ 100°C, %	<0.1
Weight Loss Ratio @ 150°C, %	<0.1
Weight Loss Ratio @ 200°C, %	0.2
Weight Loss Ratio @ 250°C, %	0.72
Weight Loss Ratio @ 300°C, %	1.93
Weight Loss Ratio @ 350°C, %	5.03
Degradation Temp., (TGA 10 °C / min) °C	350
Thermal Conductivity, W/mK	0.2
Surface Resistivity, ohm	$2.3*10^{14}$
Volume Resistivity, ohm-cm	$5.2*10^{15}$
Dielectric Constant, 60HZ	2.73
Dielectric Constant, 1000HZ	2.72
Dielectric Constant, 100000HZ	2.70
Dielectric Strength, KV/mm	>25
Temperature Range, °C	- 20 ~ 180

* Specimen Cure Condition : 130° C / 1hr

DIRECTION OF USE

1. Before use, the package of this product should be placed at room temperature for 1 to 2 hours. Do not loosen container cover before temperature equilibration.
2. 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.
3. Cure time on the really part will depend upon facto rs such as part geometry, materials to be bonded, bondline thickness and efficiency of the oven. Cure schedule should be confirmed with actual production parts and equipment.
4. The processing methods of this product are brushing and dipping
5. When not using, it should immediately replace the lid to prevent the product and moisture contact, so that the product properties are changed.

STORAGE AND SHELF LIFE

This resin should be kept without any possibility of moisture and heat exposure. It should be storage at 2 ºC ~ 13ºC before opening the containers. Shelf life of this product is six months. When not using, it should immediately replace the lid to prevent the product from moisture contact.

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.