GLT C369-2

High Performance Epoxy Adhesive

INTRODUCTION

GLT C369-2 is a two component, medium viscosity, toughened epoxy. Cured resin forms a tough, and provides high peel and shear strength in the same time. The crack and fatigue resistance of this resin are outstanding in many vibrational applications. This product is suited for different substrates, including plastics, metals, glass and ceramics. The durability of this resin is very high levels and this resin can pass many environmental test experiments. For its characteristic and reliability, this product is used widly in various areas, as a high performance adhesive.

FEATURES

- The retained strength of this resin after environmental test experiments is excellent.
- This product offers outstanding shear and peel strength. It exhibits excellent adhesion strength for every cure condition. This resin has more excellent adhesion strength than any other epoxy resin.
- This resin has higher Tg than all the other two component epoxy.
- The cured product is effective against moisture and water.
- Curesd resin offers excellent chemical resistance and solvent resistance.
- This resin exhibits excellent thixrtropic. This product can be also controled flow and have sag resistance.
- This product complies to the 2011/65/EU RoHS regulations.

TYPICAL UNCURED PROPERTIES

PROPERTIES	GLT C369-2A	GLT C369-2B
Appearance	Liquid	Liquid
Color	Black	Yellow
Viscosity 25°C, cps	22,000~34,000 S14 20rpm	13,000~22,000 S14 50rpm
Viscosity 25°C, cps	60,000~100,000 S14 2rpm	17,000~30,000 S14 5rpm
Thixotropic Index	> 2	>1.2
Mixing Viscosity 25°C, S14 20rpm, cps	27,000~42,000	
Thixotropic Index	> 2.5	

TYPICAL CURING PROPERTIES

PROPERTIES	
Mix Rate (A : B) By Weight	2 : 1
Pot Life, 25 °C,min	20~30
Surface Dry Time, 25°C,hr	4
Through Cure Time, 25°C, days	7
Through Cure Time, 80°C, hr	1

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 thoroughly by weight 2 : 1. Mix approximately 15 seconds after uniform color is obtained.
3. For optimum properties mixed, this product should be used before its pot life.
4. For maximum bonding strength apply adhesive evenly to both surfaces to be jointed.
5. Contact pressure is recommended during this resin cure.
6. The handling information of this product supplied in dual syringe cartridge can be obtained by requesting a copy of "Introduction for Adhesive Cartridge Dispenser", F-06122201.

TYPICAL CURED PROPERTIES[*1]

PROPERTIES	
Glass Transition Temp.[*1] (DSC), °C	60
Glass Transition Temp.[*1] (MDSC), °C	62
Glass Transition Temp.[*1] (TMA), °C	66
CTE[*10] (35~55°C), μm/m/ °C	96
CTE[*10] (90~130°C), μm/m/ °C	188
Durometer Hardness, Shore D[*1]	76
Specific Gravity[*1]	1.07
Water Absorption Ratio[*1] (25°C/24hr), %	0.24
Water Absorption Ratio[*1] (80°C/24hr), %	2.19
Water Absorption Ratio[*1] (97°C/1.5hr), %	0.78
Shear Strength[*1] Al vs.Al, kgf/cm2	454
Shear Strength[*2] Al vs.Al, kgf	365
Shear Strength[*3] Al vs. Al, kgf	517
Shear Strength[*4] Al vs. Al, kgf	629
Shear Strength[*5] Al vs. Al, kgf	3,269
Shear Strength[*6] Al vs. Al, kgf	271
Shear Strength[*7] Al vs. Al, kgf	426
Shear Strength[*8] Al vs.Al, kgf	516
Shear Strength[*9] Al vs.Al, kgf	3,234
Degradation Temp, (TGA 10 oC /min) °C	288
Weight Loss Ratio[*1] @100°C, %	0.01
Weight Loss Ratio[*1] @150°C, %	0.63
Weight Loss Ratio[*1] @200°C, %	1.19
Weight Loss Ratio[*1] @250°C, %	2.52
Weight Loss Ratio[*1] @300°C, %	6.06
Weight Loss Ratio[*1] @350°C, %	11.19
Thermal Conductivity, W/mK	0.3
Thermal Resistance m^2K/W	0.01
Volume Resistivity , ohm-cm	$5*10^{15}$
Surface Resistivity , ohm	$5*10^{14}$
Dielectric Constant 100Hz	4.1

*1 :Specimen Cure Condition:80°C / 60min

*2 :Specimen Cure Condition:130°C / 60min, size:25mm x 3mm

*3 :Specimen Cure Condition:130°C / 60min, size:25mm x 6mm

*4 :Specimen Cure Condition:130°C / 60min, size:25mm x 12mm

*5 :Specimen Cure Condition:130°C / 60min, size:50mm x 25.4mm

*6 :Specimen Cure Condition:65°C / 60min, size:25mm x 3mm

*7 :Specimen Cure Condition:65°C / 60min, size:25mm x 6mm

*8 :Specimen Cure Condition:65°C / 60min, size:25mm x 12mm

*9 :Specimen Cure Condition:65°C / 60min, size:50mm x 25.4mm

*10:CTE: Coefficient of Thermal Expansion

STORAGE AND SHELF LIFE

The container should be stored in cool and dark place. The resin and hardener will become yellow under the sunlight. This product is amine content, replace the lid immediately after use. Keep without any possibility of wet when not using. Shelf life of this product is one year 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 resin 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 more information, refer to the Material Safety Data Sheet.