

### Description

CT 6310W is a one-part, solvent free epoxy. It has excellent bonding strength to various substrates, and is compatible with flux residues of solder pastes. It is designed for FPC coating and component protection.

### Features

- Recommended substrates: glass, aluminum, stainless steel, LCP, nylon, FPC and PCB
- Both regular thermal and SMT reflow process curing
- Good dielectric properties, low Dk and Df values

### Uncured Properties

<b>Chemical Type</b>	Epoxy
<b>Appearance</b>	White
<b>Viscosity @ 25°C [mPa·s]</b> Brookfield DV2T, spindle 14# @ 20rpm	32,000
<b>Specific Gravity [g/cm<sup>3</sup>]</b>	~1.2
<b>Shelf Life @ 2-8°C [months]</b>	6
<b>Pot Life @ 25°C [hrs]</b>	48

### Curing Conditions

<b>Thermal Curing @150°C [mins]</b>	10
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### Cured Properties

<b>Hardness [Shore D]</b> ASTM D2240	75
<b>Lap Shear Strength [MPa]</b> Stainless steel to stainless steel PCB to PCB ASTM D1002	26 20
<b>Tensile Strength [MPa]</b> ASTM D638	46
<b>Elongation at Break [%]</b> ASTM D638	1
<b>Glass Transition Temperature (Tg) [°C]</b> ISO 11359	90

<b>Coefficient of Thermal Expansion (CTE) [ppm/K]</b> below Tg above Tg ASTM D696	50 189
<b>Surface Resistivity [ohm·cm]</b> ASTM D257	>1.0x10 <sup>15</sup>
<b>Volume Resistivity [ohm·cm]</b> ASTM D257	>1.0x10 <sup>15</sup>
<b>Dielectric Strength [V/mil]</b> ASTM D149	350
<b>Dielectric Constant (Dk) @ 1.5GHz</b> ASTM D150	2.73
<b>Dissipation Factor (Df) @ 1.5GHz</b> ASTM D150	0.009

### Directions for Use

#### 1. Surface Treatment

Surfaces to be bonded should be free of dust, oil, grease or any other contaminants in order to achieve a reproducible bond. For slightly contaminated surfaces, it is sufficient to wipe with isopropanol or ethanol. Substrates with a low surface energy (e.g. polyethylene, polypropylene, Teflon) need to be pre-treated physically (e.g. atmospheric plasma or corona) in order to achieve sufficient adhesion.

#### 2. Application

Products are supplied ready for use. Depending on package type, they can be dosed manually, semi-automatically or fully-automatically with a dosage apparatus. With automatic dispensing using a cartridge, the adhesive is conveyed via pressure and a piston rod to a dispense valve. With bottles, the adhesive is conveyed using a pump.

After application, it is recommended that the two substrates be adjoined immediately as it is possible the

curing process will begin with select products under ambient conditions.

3. Suggested working temperature range is -40 to 260°C.

### Storage

Maximum shelf life may be obtained when product is stored in a cool, dry location at a temperature between **2°C to 8°C**.

TO PREVENT CONTAMINATION OF UNUSED PRODUCT, DO NOT RETURN ANY PRODUCT TO ITS ORIGINAL CONTAINER.

**Allow the product to thaw for two hours after it is removed from the refrigerator prior to use.** It is best practice to wipe away any moisture on the surface of the syringe with cleanroom wipes.

### Materials Handling

Refer to the Material Safety Data Sheet (MSDS) for this product.

#### *Disclaimer*

*The information provided here including the recommendations for use and application of the product is based on internal laboratory test conditions and should only be used as a reference. CollTech does not assume responsibility for the test or performance results obtained by the user. It is the responsibility of the user to perform their own evaluations to confirm whether this product is suitable for their application.*