

## TG-LH-EE-90-2-5

# **Electronics Epoxy**

#### Description

TG-LH-EE-90-2-5 is a one-part white adhesive based on epoxy resins. It cures fast at elevated temperatures and has excellent adhesion to most pc boards and electronic components. It may be cured at 100 °C or faster at 175 °C. It has no sagging. It has a stable pot life and long shelf life even at room temperature of 2 °C. It has been designed especially for bonding electronic components. It has relatively low viscosity for faster dispense from syringes. It has high thixotropic which can control the flow of the adhesive.

#### **Applications**

Epoxy adhesive for attaching to ceramic, metals, and most plastics in electronics

#### **Guidelines for Use**

- 1. Thaw the epoxy to room temperature (25 °C) before use
- 2. Dispense the epoxy by using a syringe
- 3. Wipe off any excess uncured adhesive with a piece of dry cloth or tissue. Further cleaning may be achieved with tissue dabbed with iso-propanol-alcohol (IPA)
- 4. Cure the epoxy by heating at 100 °C for 120 minutes in a convection oven. Curing at lower temperature will require a longertime

#### **Properties**

- REACH Compliant
- ROSH Compliant

Property	TG-LH-EE-90	Unit	Test Method
Chemical type	Ероху	-	-
Appearance	White paste	-	Visual
Mix ratio, by weight	One component	-	-
Shelf life, 2°C	6	Month	ASTM F2914
Pot life, 25°C	1	Week	ASTM F2914
Viscosity, CAP 2000+ viscometer, 25°C Cap-06@40rpm	24,000	cps	ASTM D1084
Thixotropic Index	1.8	-	-
Hardness, cured 100°C for 2 hr	90	Shore D	ASTM D2240
Shear Strength	545	kgcm <sup>-2</sup>	ASTM D412
Water boil, wt gain, 100°C/1hr	0.35	%	-
Tg, DSC, cured 100°C for 2 hr	122	°C	-
Specific gravity	1.20	g/cm³	ASTM D792
CTE, alpha-1	$6.2 \times 10^{-5}$	mm <sup>-1</sup> °C <sup>-1</sup>	-
, alpha-2	1.8 x 10 <sup>-4</sup>	mm <sup>-1</sup> °C <sup>-1</sup>	-
Ionic Content, Cl	₹50	ppm	-
, K	₹50	ppm	-
, Na	₹20	ppm	-

#### **Packaging**

5 ml EFD syringe 10 ml EFD syringe 30 ml EFD syringe



#### Recommended Cure

Temp. (°C)	Gel time	Cure time
100	12 mins	2 hrs
150	2 mins	30 mins

### <u>St</u>orage

Store in fridge at 2°C. Tightly close original container of unused product. Storing at lower temperatures down to -20°C may prolong shelf life beyond 6 months. However it may take longer time to thaw the product

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