

# **Technical Data Sheet**

# **GLT-UV-BL02**

## **UV Curing, Single-component Modified Epoxy Adhesive**

GLT-UV-BL02 is a single component, modified epoxy based adhesive with excellent adhesion on various polymeric substrates as polycarbonate, polyamide, PET, ABS, etc when cured upon exposure to ultraviolet light. GLT-UV-BL02 is formulated for low shrinkage and cured with excellent thermal, chemical and moisture resistance.

#### **FEATURE**

- · One-part, UV curing epoxy based adhesive
- Excellent moisture resistance
- High service temperature
- Bonds plastics to plastics, metals, glass or ceramics

#### **TYPICAL UNCURED PROPERTIES**

| Properties           |               |
|----------------------|---------------|
| Base                 | Ероху         |
| Appearance           | Black liquid  |
| Viscosity *25°C, cps | 1,200 ~ 1,800 |
| Solids content, %    | 100           |
| Specific gravity     | 1.15          |
| Odour                | Mild          |

### **TYPICAL CURING PROPERTIES**

GLT-UV-BLO2 cures rapidly upon exposure to ultraviolet (UV) light or ultraviolet visible (UVV) light of sufficient intensity. Cure speed by UV is a function of UV light source, UV intensity, and bondline thickness.

| Recommended Curing Condition |             |
|------------------------------|-------------|
| Type of radiation            | UV-A & UV-V |
| Range of wavelength, nm      | 365 - 395   |
| Energy, mJ/cm²               | 4,000       |

# **TYPICAL CURED PROPERTIES**

| PHYSICAL PROPERTIES             |               |
|---------------------------------|---------------|
| Appearance                      | Black polymer |
| Tensile strength @break, N/mm²  | 10.8          |
| Modulus, N/mm²                  | 1,196         |
| PERFORMANCE PROPERTIES          |               |
| Shear Strength (PC/ PC), N/mm²  | 4.3           |
| THERMAL PROPERTIES              | 342           |
| Suggested temperature range, °C | -40 to 140    |

Actual performance at service temperature should be determined on actual assemblies and under actual service conditions.

#### **HANDLING**

This product is UV sensitive. Exposure to daylight, UV light and artificial lighting should be kept to a minimum during storage and handling. Product should be dispensed from applicators with black feed lines. For best performance bond surfaces should be clean and free from grease. UV cure rate is dependent on lamp intensity, distance from light source, depth of cure needed or bondline gap and light transmittance of the substrate through which the radiation must pass.

For safe handling information on this product, consult the Safety Data Sheet (SDS).

#### **STORAGE**

Product shall be ideally stored in a cool, dry location in unopened containers at a temperature at 5°C to 15°C unless otherwise labelled. Optimal storage is at the lower half of this temperature range. Allow product to be fully conditioned to room temperature before use. To prevent contamination of unused product, do not return any material to its original container.

## CAUTION

- 1. Exposure to short wave ultraviolet light can cause a burning of the skin and eyes. Care should be taken to avoid exposure of the operator to direct or reflected radiation. User should wear eye protection.
- 2. Avoid prolonged breathing of fumes. Use in well ventilated rooms
- 3. The uncured resin may irritate skin and eyes for sensitive users. Minimise skin contact. In case of eye contact, flush with water for at least 15 minutes and seek medical attention. In case of skin contact, wash with soap and water.