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## EPO-HTG™ 434 Resin

EPO-HTG™ 434 is a 180°C curing modified epoxy resin system with good hot performance. EPO-HTG™ 434 is designed for the traditional autoclave, press moulding and sheet winding processes. A 120 minutes cure at 180°C may be used. Unidirectional and woven fabric prepreg with EPO-HTG™ 434 will retain tack a few days at room temperature.

### ■ Description

- ◇ Good mechanical properties
- ◇ Good hot performance
- ◇ About 200°C glass transition temperature
- ◇ Good for SW moulding process
- ◇ Available for carbon or glass tapes or fabrics

### ■ Curing conditions:

Ideal cure cycle is 180°C/120min with an adequate pressure applying after 5-10min when system temperature has been achieved to 180°C. Alternative cure cycles can be used for SW moulding process:

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1. Ramp  $2^{\circ}\text{C}/\text{min}$  to  $120^{\circ}\text{C}$ ; hold for 70 min;  $2^{\circ}\text{C}/\text{min}$  ramp to  $180^{\circ}\text{C}$ ; hold for 120 min.
2. A dwell time would be recommended to avoid the resin exotherm usually at  $120^{\circ}\text{C}$ . The dwell time is dependent on the mass and the type of tool.

◇ Heat-up rate for thicker wall structure would be recommended not to be more than  $5^{\circ}\text{C}/\text{min}$ .

- I. The time applying pressure should be adjusted with varied shapes and cross-sections.
- II. The effective pressure should be also adjusted with different requirements of cured products such as fibre/resin fraction, amendment of thickness etc.

#### ■ Handling and storage

##### Storage temperature:

##### ■ Resin system:

Shelf life:  $-15^{\circ}\text{C}$  for 6 months.

##### ■ Prepreg:

Out life: 3 weeks at  $21^{\circ}\text{C}$

Shelf life:  $4^{\circ}\text{C}$  for 3 months or  $-15^{\circ}\text{C}$  for 6 months.

**Handling:** Wear protective mask /glasses/gloves/clothing. Wash thoroughly after handling.

#### ■ Important

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