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EPO-HMTM (IP04)B Resin

EPO-HMTM (IP04)B system is designed for bladder moulding process for high impact resistance and peel strength requirement without sacrificing the desired moduli of varied loading directions on composites. Remarkable fatigue resistance that can maintain the stiffness during cyclic loading fits to the severe dynamic demands. Unidirectional tapes and woven fabrics impregnated with EPO-HMTM (IP04)B will have about 7 or more days tack life at room temperature.

■ Description

- ◇ Toughened epoxy resin system
- ◇ Remarkable impact resistance
- ◇ Designed for bladder moulding application
- ◇ Available for carbon or glass tapes or fabrics
- ◇ Stable processing under higher inner pressure

■ Curing conditions

EPO-HMTM (IP04)B can be cured at the temperature from 130⁰C to 150⁰C depending on the individual requirement. Low, medium and high curing pressure may be applied



during EPO-HMTM (IP04)B curing process to obtain a proper surface condition and desired resin content. Recommended cure cycle for thin-walled structures are as below.

1. Lower curing pressure; heating rate $>10^{\circ}\text{C}/\text{min}$ ramp to 130°C ; hold for 40 minutes; cool to $<60^{\circ}\text{C}$.
 2. Higher curing pressure is above 7 bar; Ramp to 150°C and hold for 20 or 30 minutes depending on the wall thickness; cool to $<60^{\circ}\text{C}$.
 - ◇ 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°C for 6 months.

■ Prepreg:

Out life: 4 weeks at 21°C

Shelf life: 4°C for 3 months or -15°C for 6 months.

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

■ Important

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