

EKOATAPE P-UD 3.2 TECHNICAL DATA SHEET

Lingrove's Ekoa is a fiber reinforced pre-impregnated composite material with high performance and low environmental impact. This product is made from D-UD 3.2 flax linen and conventional epoxy resin.

Fabric Specification

Fabric Type	Flax (EU)
Construction	0°
Fabric Weight	3.2 oz/yd ² (110 gsm +/- 5%)
Standard Width	15.7 inches (400mm)
Standard Roll Length	98 yards (90 linear meters)

Mechanical Properties

Properties measured on samples with 20 layers aligned at 0°, manufactured in a press with 5 bars pressure (50% fiber weight after process).

Tensile Strength 0° ASTM D3039	391.6 MPa	56.8 Ksi
Tensile Modulus 0° ASTM D3039	38.3 GPa	5.6 Msi
Flextural Strength 0° ASTM D7264	279.2 MPa	40.5 Ksi
Flextural Modulus 0° ASTM D7264	43.5 GPa	5.0 Msi

Pre-preg Specifications

Lingrove® pre-preg systems are available in CORAL, a traditional high temperature cure (250°F, 120°) pre-preg resin system, or SHARK, a lower activation temperature (220°F, 100°C), faster curing pre-preg resin system. Both systems exhibit excellent mechanical properties—CORAL is our standard system.

Recommended Cure Cycles

For best results, a heat ramp of 1-2°/min with a dwell at 180°F (80°C) for 30 minutes and an additional dwell at the minimum activation temperature for 30 minutes is recommended.

Typical fiber weight ratio: 50% (+/- 3%)

Out Life at 68°F (20°C): 15 days (Shark), 30 days (Coral)

Storage

The material should be kept frozen at -18°C. It must be kept in sealed plastic bags which must not be opened until fully thawed to room temperature. Shelf life at -18°C is no less than 12 months.

Health & Safety

Exposure to these materials represents hazards typical to all epoxy resins. Exposure should be minimized and avoided through the use of proper protective clothing and equipment and appropriate manufacturing controls. All persons who use, store, or transport these materials should properly understand the handling precautions and recommendations as stated in the MSDS. Please refer to the MSDS for the most up to date Safety and Handling information.

Processing Guidelines

Near-zero CTE, hence good processing compatibility with carbon fibers.

Suitable for: Vacuum molding, autoclave molding, bladder molding (BIM), and compression molding.