Version 1.3

Lingrove Ekoa is a fiber reinforced pre-impregnated composite material with high performance and low environmental impact. This product is made from flax fabrics and thermoplastic resin. The Ekoa TP2 line covers all 'Ekoa Auto' products.

# **General Specifications**

Fiber Type	Flax (EU)
Construction	0° (UD)
Material Density	12.7 oz/yd² (430gsm), 18.0 oz/yd² (610gsm)
Standard widths	15.75" (400 mm), 57" (1450mm)
Standard roll length	295 ft (90 m)
Standard thickness	0.014" (0.36mm), 0.022" (0.56mm)

## Mechanical properties

Properties measured on samples with 0.022" thickness product aligned at  $0^{\circ}$ .

Tensile Modulus (MD)	724 Mpa	105 ksi
Tensile Strength (MD)	257 Mpa	37.3 ksi
Compression Modulus	TBD	TBD
Compression Strength	TBD	TBD

# **Processing Guidelines**

Compatible with compression molding and vacuum-forming. Use IR, convection, or in-mold heating processes. Short transfer and mold close times are critical for successful molding, as the material loses heat quickly.

#### General 3D Molding Parameters:

Preheat	Mold Temp	Pressure	Press Time
180-200C Oven Temp, 3min preheat	60-100C	10+ psi	15s

3D Molding parameters vary based on tooling and processing equipment. Please <u>contact</u> Lingrove for detailed recommendations based on your application.

#### Storage

Store in a low relative humidity environment and out of direct sunlight.

### Health and Safety

Refer to relevant SDS for more information regarding safe handling and processing of Ekoa.