



# **CONTOURA**<sup>™</sup>

Prepreg composites for automotive and aerospace

## **Features**

- Superior rigidity and stiffness for weight profile
- Customizable solution to meet mechanical performance needs and sustainability targets, simultaneously
- Heat stability up to 220°C
- Enhanced flame retardancy and fungal growth resistance with customized formulation

## **Benefits**

- Light-weighting: 20-60% lighter than polypropylene at same mechanical performance
- Sustainable materials: up to 75% renewable content with natural fibers, no solvents and no added formaldehyde
- Low cost, simple production: ready-to-mold with no wet chemistry required



CONTOURA prepreg made with natural fiber nonwoven

# **CONTOURA**<sup>™</sup> Customizable prepreg composites for light-weighting and sourcing of sustainable material

### Shape a lighter, more sustainable future with CONTOURA

CONTOURA composites combine the strength and rigidity of water-based resin with the structure of nonwoven fiber mats to create a lightweight alternative to metal, polypropylene, or ABS. CONTOURA composites are ready-to-mold prepregs, which only require a hot or cold press, depending on your preference of thermoset or thermoplastic resin. A highly customizable technology platform, CONTOURA can be made with fibers of your choice - natural, glass, or synthetic - tailored to achieve your mechanical performance requirements and simultaneously support your sustainability goals. Use CONTOURA composites in your next generation of automotive or aerospace components, for high performance without the extra weight.

#### **CONTOURA vs. Polypropylene: Weight Savings**

Materials at variable thickness, achieving same tensile strength of 18-22 MPa



When applied to a standard light-duty vehicle door panel, using CONTOURA instead of polypropylene can reduce weight by up to a half pound per door, or 2 pounds per vehicle.

#### CONTOURA can also be customized to:

- Hinder bacterial or fungal growth
- Decrease flammability
- Provide aesthetic benefit through use of color (see right)



Top: natural fiber CONTOURA, without pigment.

Bottom: natural fiber CONTOURA with various pigments

#### CONTOURA vs. glass-fiber reinforced polypropylene Carbon footprint, including vehicle use-phase



#### **CONTOURA: The Sustainable Choice**

- Life cycle assessment conducted to compare glass fiber-reinforced polypropylene with CONTOURA made with natural fiber nonwoven
- Results show a 40% reduction in carbon footprint due to sustainable sourcing & light-weighting

# **CONTOURA**<sup>™</sup>

Prepreg composites custom-tailored to meet performance specifications and sustainability targets

#### **CONTOURA vs. engineering plastics**

Materials at 2mm thickness, achieving same (respective) flexural modulus (MPa)



Replace traditional engineering plastics with CONTOURA composites to achieve the same flexural modulus, at 40% lower weight.

#### **Recommended automotive applications**



#### Contacts

Please contact our technical service department for more help on formulating with products from the CONTOURA Line.

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