

COMPOSITE TECHNOLOGIES

TECHNICAL DATA SHEET

Thermoplastic PP-Glass Prepreg

Product

It is a thermoplastic product that is made up of TW600 glass woven and highly crystalline polypropylene. This product can also be produced with different glass fabrics and different resin contents.

Typical Applications

- » Industrial composites
- » Sport & Leisure
- » Automotive
- » Transportation

Prepreg Properties

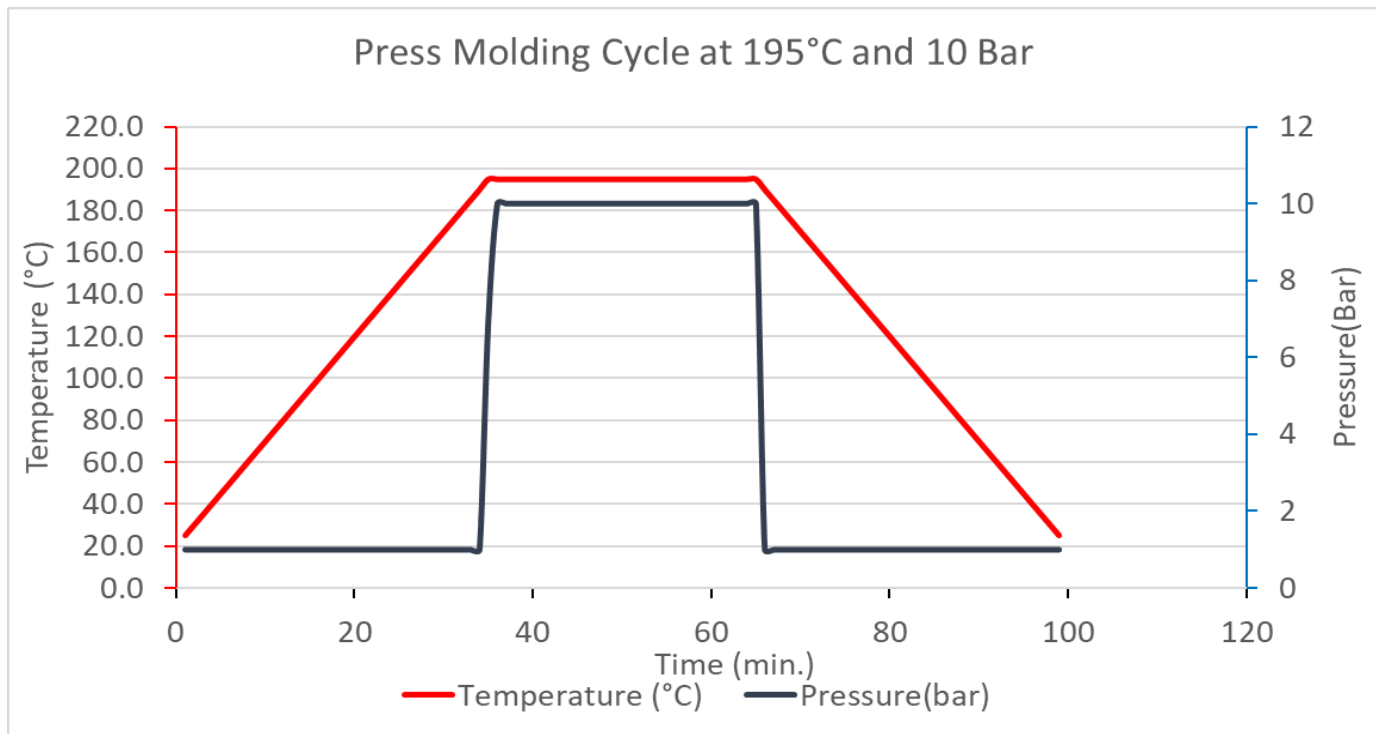
Matrix Type	High Crystalline Polypropylene (PP)
Fabric Type	PP Compatible TW600 1200 Tex Glass Fabric
Fabric Weight Fraction	70%
Resin Weight Fraction	30%
Prepreg Thickness	2 mm ± 5%
Resin Melt Temperature	167 °C
Resin Glass Transition Temperature	-7 °C
Processing Temperature	195 – 215°C
Color	Natural

***Our products are flexible by design:
Additional weights, roll sizes, and reinforcements are available.***

Recommended Processing Cycle

Press Molding Cycle

- 1) Place the PP coated glass fabric on press and put thermocouple between prepregs.
- 2) Heat up the press with 5 °C/min. to 200 °C.
- 3) Until the thermocouple's temperature reaches comes to 195 °C, apply 1 bar pressure.
- 4) After reaching 195 °C, apply 10 bar pressure for 30 minutes.
- 5) Cool down the press and apply 1 bar pressure.
- 6) When thermocouple's temperature reaches comes to 25 °C, take out the plates from press.



Physical and Mechanical Properties

Property	Standard	Test Temp.	Property	600 GSM E-Glass Twill Fabric 1200 TEX 30% Resin Content
Tensile	ISO 527-4	25 °C	0° Tensile Strength MPa	440
			0° Tensile Modulus GPa	18.9
			90° Tensile Strength MPa	380
			90° Tensile Modulus GPa	19
Compression	ASTM D3410	25 °C	0° Compressive Strength MPa	148
			0° Compressive Modulus GPa	20.6
			90° Compressive Strength MPa	151
			90° Compressive Modulus GPa	20
Flexural	ASTM D790	25 °C	0° Flexural Strength MPa	205
			0° Flexural Modulus GPa	10.2
			90° Flexural Strength MPa	155

			90° Flexural Modulus GPa	4.7
V-notch Shear	ASTM D5379	25 °C	0° Shear Strength MPa	26.6
			0° Shear Modulus GPa	1.1
			90° Shear Strength MPa	24.8
			90° Shear Modulus GPa	1.1
Impact	ISO 179	25 °C	0° Impact Energy KJ/m ²	132.7
			90° Impact Energy KJ/m ²	140.5

Shelf Life

» Indefinite at 25 °C

Handling & Safety Instructions

- » Use the appropriate safety equipment for this product.
- » Refer to Material Safety Data Sheet for specific safety instructions.

Technical Assistance

In a bind? Call us anytime. We provide fast and knowledgeable technical support:

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Ver: February.2024

**<https://www.kordsa.com>
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