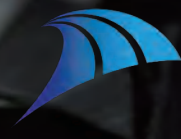


Unidirectional thermoplastic tape consists of carbon fiber and polypropylene

# TAFNEX™ CF-PP UD



Mitsui Chemicals Group

## Introduction

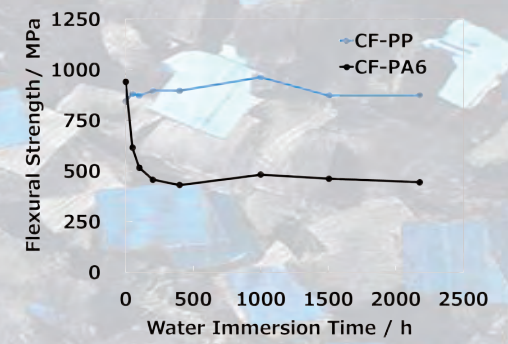
- Excellent processability due to PP matrix resin (e.g. thermoforming, tube winding, tape placement or back-injection molding)
- High stiffness and strength at low density with low moisture absorption
- UD tape availability in widths from 3 to 600 mm



## Mechanical properties

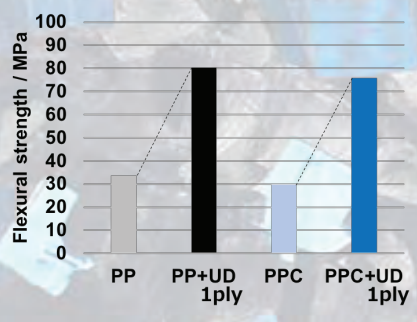
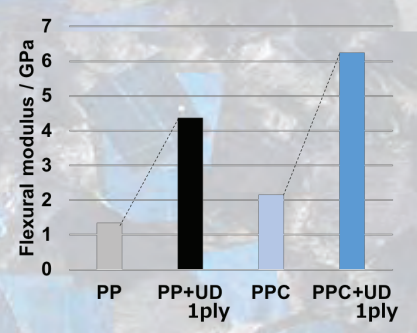
		Measurement method	CF-PP UD
Vf	%	JIS K7075:1991	50
Density	g/cm <sup>3</sup>	MCI method	1.31
Tensile strength	MPa	DIN EN ISO 527-5	1460
Tensile modulus	GPa	DIN EN ISO 527-5	110
Flexural strength	MPa	DIN EN ISO 14125	1015
Flexural modulus	GPa	DIN EN ISO 14125	105
Specific strength	kNm/kg		1114
Specific rigidity	10 <sup>6</sup> m <sup>2</sup> s <sup>-2</sup>		84

## Durability



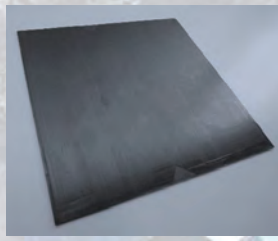
Mechanical properties changes with time due to the water dipping test

## Reinforcement effect



※PPC:PP Compound including Talc

## Examples for processing



Organic sheet (cross-ply)



Partial reinforcement



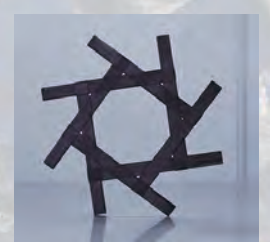
Appearance design



Thermoforming and back-injection molding



Overmolding of winded tube



Tape placement

## Design based on TAFNEX™



※The written contents here are based on currently available information and data. We do not provide any warranty about the listed data and evaluation

[www.tafnex.eu](http://www.tafnex.eu)