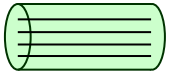
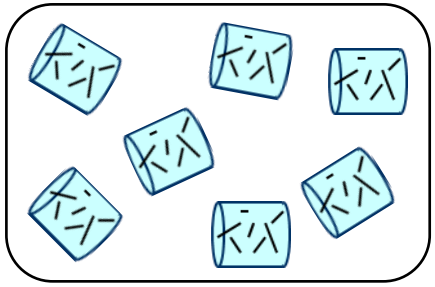
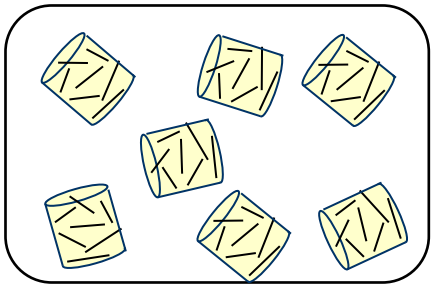
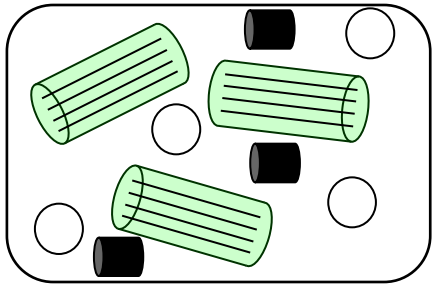
GFPP Variation

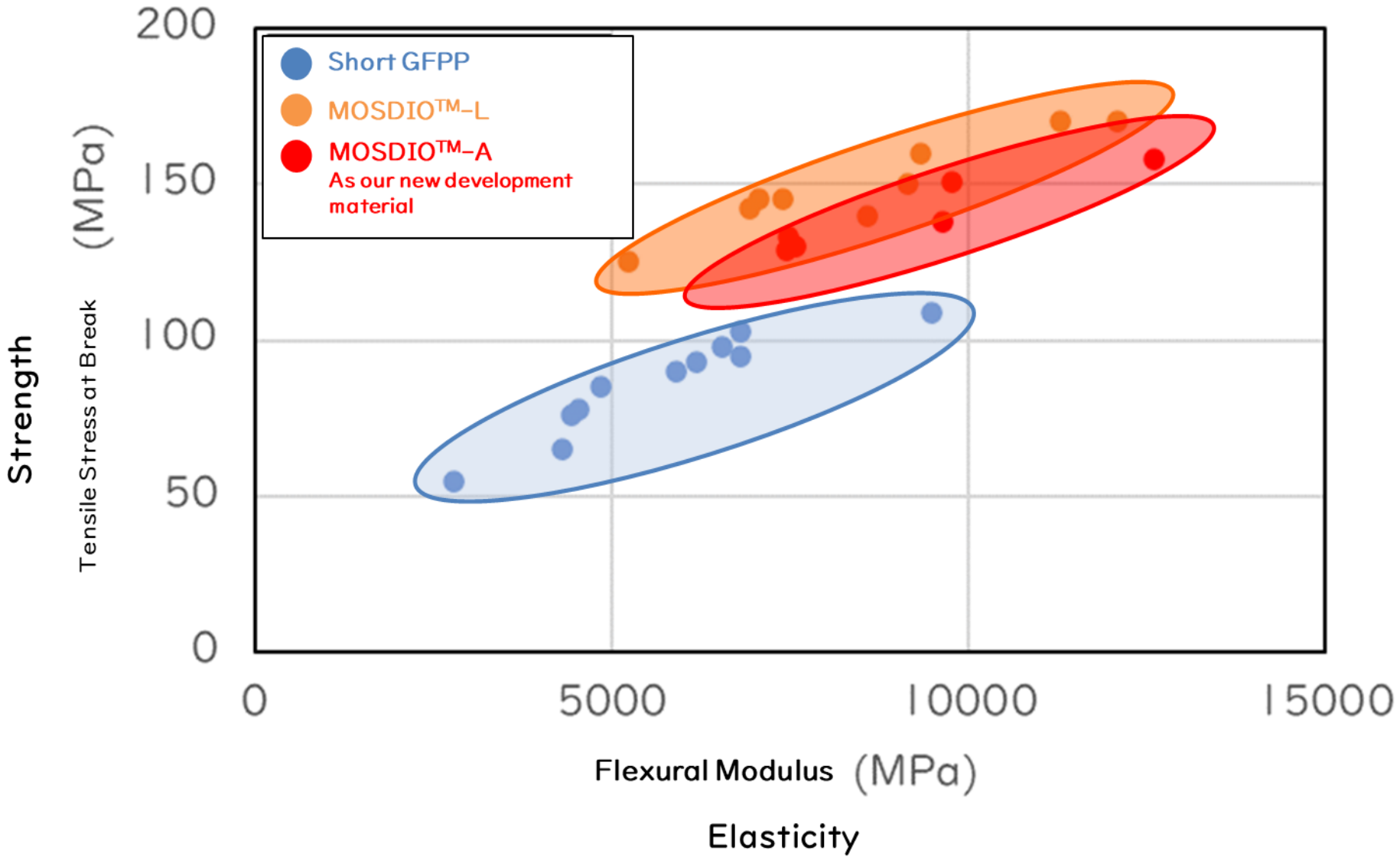
GFPP is a composite material obtained by melting and mixing glass fibers and polypropylene resin.
The superior properties of polypropylene-resin (such as low GHG, light weight, and water resistance) , the strength and heat resistance of glass fiber are combined.

◆GFPP Variation

	Prime Polypro Short Glass-Fiber Reinforced Polypropylene	MOSDIO™-A Glass-Fiber Reinforced PP with High strength	MOSDIO™-L Long Glass-Fiber Reinforced Polypropylene
Pellet shape	 ～Square pellets of 5mm	 ～Square pellets of 5mm	 Cylindrical pellets of about 9 mm
GF length in pellets	＜1mm	1～2mm	Length of pellets= GF length
GF content	10～40wt%	30～50wt%	50wt%（GFMB） GF content with dry blend is available for adjustment
GFPP grades	 Single pellets	 Single pellets	 Dry blend of GFMB + dilution PP (+ colored MB)

Mechanical property characteristics

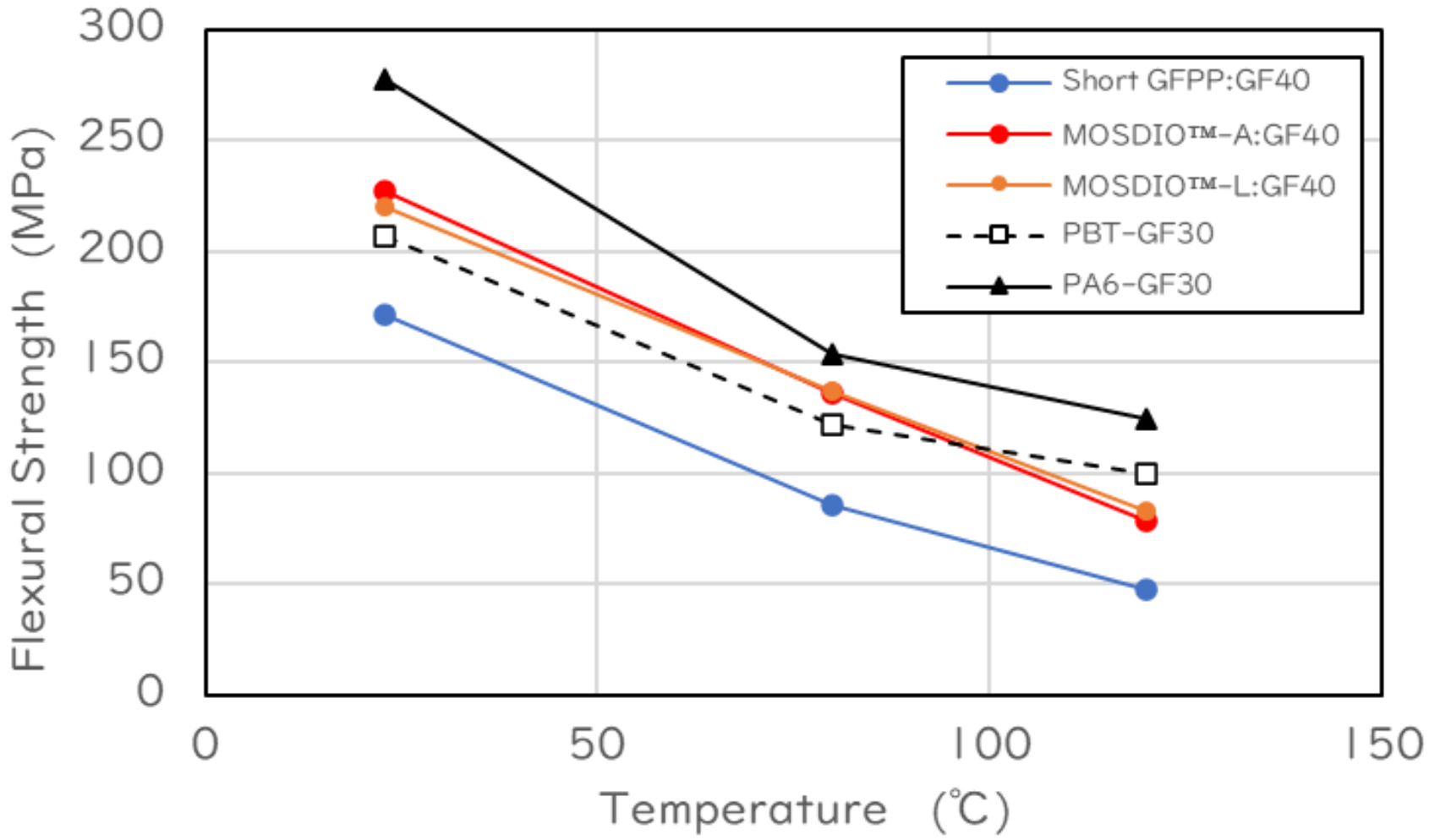
(According to our internal comparison)



・Data here is representative value based on certain conditions

High temperature physical properties characteristics

(According to our internal comparison)

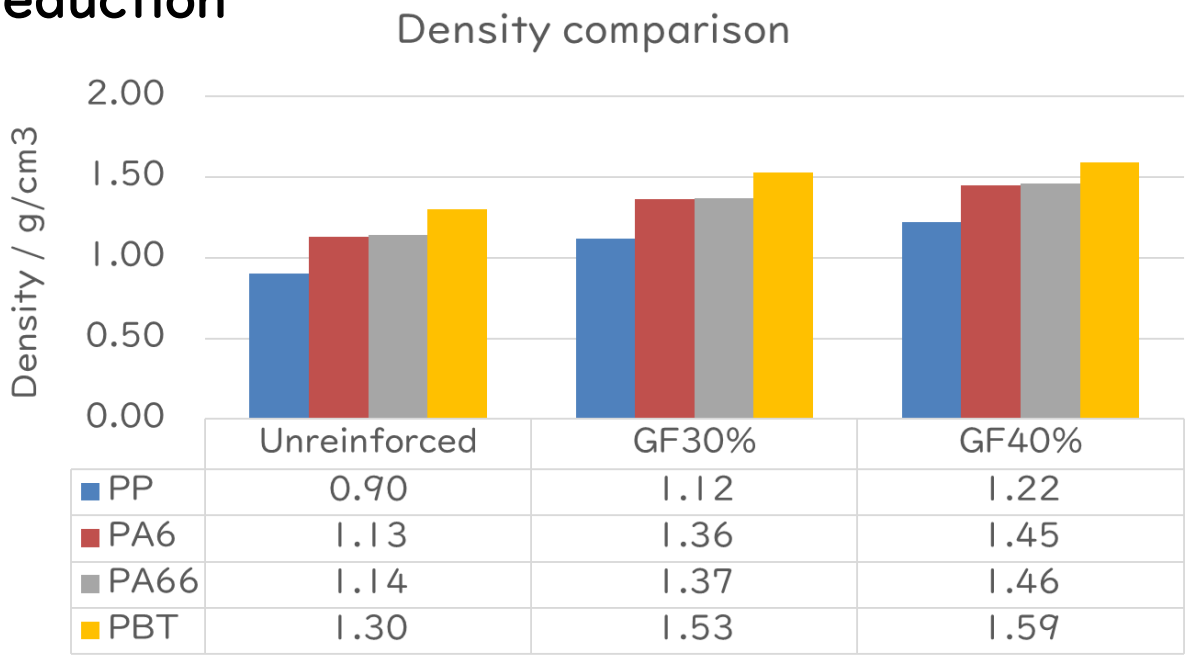


・Data here is representative value based on certain conditions

Weight Reduction & Heat Resistance

◆Weight reduction

(According to our internal comparison)



	Unreinforced	GF30%	GF40%
PP	0.90	1.12	1.22
PA6	1.13	1.36	1.45
PA66	1.14	1.37	1.46
PBT	1.30	1.53	1.59

◆Heat resistance (Melting point, Heat deflection temperature)

Although it does not have superior heat resistance compared to various engineering plastics, this has advantages in terms of molding processing.

(According to our internal comparison)

	PP	PA6	PA66	PBT
Melting Point (℃)	165	225	265	224
Heat deflection temperature (℃) *1	162	215	255	213

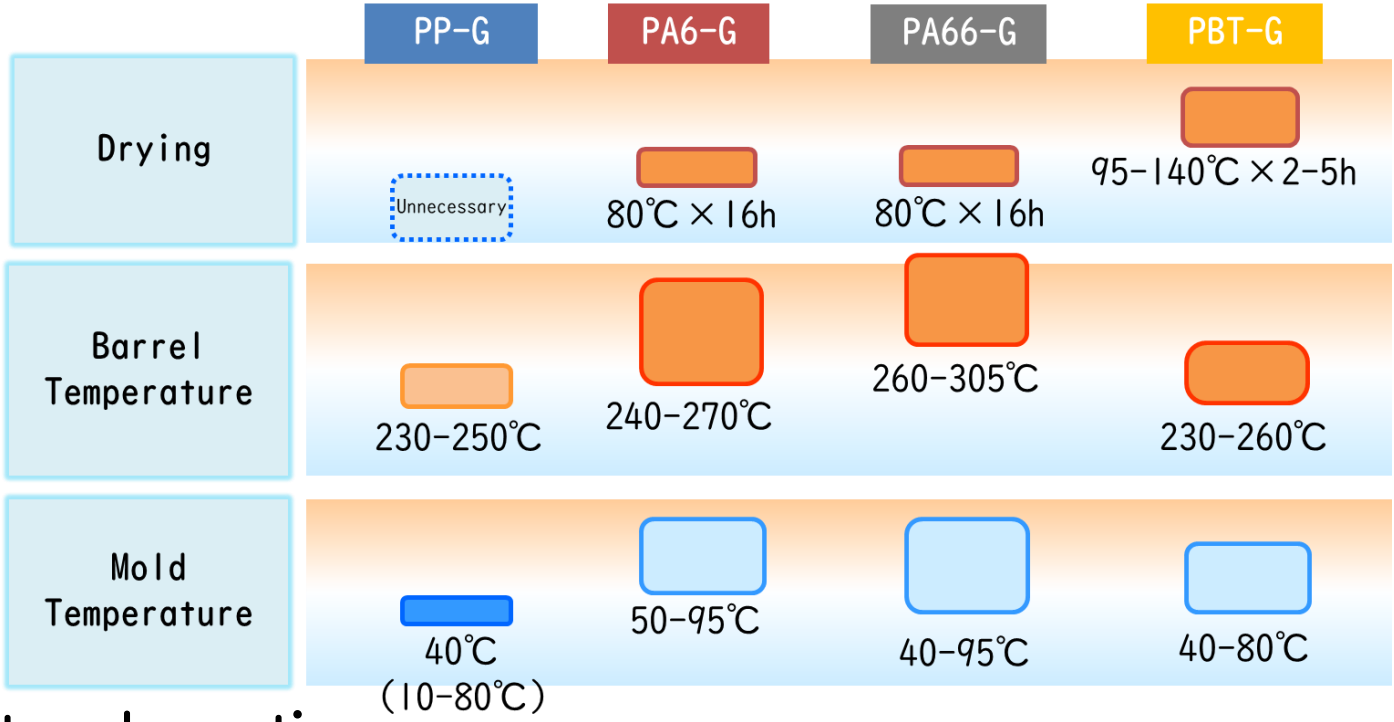
*1 : High loading(1.8MPa) , GF30%

・Data here is representative value based on certain conditions

Molding Conditions & Water Absorption

◆Molding conditions

Polypropylene basically doesn't require drying.
It can be molded at a lower temperature than various engineering plastics.



◆Water absorption

Polypropylene has an overwhelmingly lower water absorption rate than various engineering plastics.

(According to our internal comparison)

	PP	PA6	PA66	PBT
Water absorption(%)	<0.01	1.1	1.5	0.09

・Data here is representative value based on certain conditions