West Fraser

Technical Data Sheet

West Fraser 40% Cellulose Filled Polypropylene Composite

PRODUCT DESCRIPTION

A 40% cellulose fiber in a polypropylene matrix suitable for injection molding and extrusion applications.

GENERAL INFORMATION

Resin	Polypropylene homoplymer
Filler	Cellulose fiber
Fill level	40%
Uses	Injection Molding and Extrusion
Form	Pellets

PHYSICAL PROPERTIES	Typical Value	Units	Method
Specific Gravity	1.05		ASTM D792

OTHER PROPERTIES	Value	Units	Method
24-hour Moisture Uptake	0.70%	%	ASTM D570

MECHANICAL PROPERTIES	Typical Value	Units	Method
Tensile			ASTM D638
Modulus	615,000	psi	
Strength	9,000	psi	
Elongation @ Yield	2.3	%	
Flexural			ASTM D790
Modulus	550,000	psi	
Strength	12,500	psi	
Izod Impact			ASTM D256
Notched	0.4	ft-lbs/in	
Un-notched	3.5	ft-lbs/in	
Heat Deflection Temperature			ASTM D648
@ 66 psi	n/a	°C	
@ 264 psi	n/a	°C	

RECOMMENDED TARGET PROCESS CONDITIONS

Pre-Drying (varies, target <0.5% moisture)	2 hrs @ 100 °C	2 hrs @ 212 °F
Barrel temperatures	160-180 °C	320-356 °F
Die/Nozzle temperature	175-190 °C	347-374 °F

PROCESSING NOTES

Do not process at temperatures above 220° C; preferred processing temperatures are 200° C or below.

STORAGE AND PACKAGING

No special storage or packaging is required