



Product Technical Datasheet

rCF Staple Yarn

Product Description			
Carbon Fibre staple yarn made from production waste Intermediate Modulus (IM) fibres with a carbon content superior to 90%.			

Physical Properties of the yarn			
Property	Unit	Value	Comment
Density		1,74	
Sizing Type		Epoxy	Sizing from the original fibre
Yield	g/km	1500	

Properties of the reclaimed fibre (rCF)			
Property	Unit	Value	Comment
Filament diameter	µm	5	
Filament length	mm	60-80	Length distribution of the CF yarn used to make the staple yarn
Modulus	GPa	270	
Tensile strength	MPa	5000	

Mechanical properties (Tow)			
The staple yarn is made by assembling discontinuous carbon yarns and cannot be tested at tow level.			

Mechanical properties (Composite)			
The properties given have been measured on a [0/90] laminate, with a reinforcement made by tailored fibre placement (TFP) and injected (RTM) with Hexflow RTM6® resin.			
Property	Unit	Value	Comment
Fibre volume fraction	%	40	
Modulus	GPa	44	
Tensile strength	MPa	427	

