Carbon Fiber Recycling, LLC
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Technical Product Specifications

rCF from Pyrolysis

Carbon Fiber Recycling (CFR) extracts recycled carbon fiber filament (rCF) from various raw material streams utilizing a continuous feed pyrolytic reactor.

The raw material feedstock consists of carbon fiber laden products including, prepreg, composites, and dry fiber. These materials were predominantly manufactured with widely utilized, and common carbon fiber brands.

Due to the varying properties of the brands and products that were originally sourced when creating the products we recycle, CFR is providing a Typical Range of Properties, which should be used as reference only.

Recycled Carbon Fiber from Pyrolysis Properties

Typical Range of Properties - US Units

Fiber Type	Filament Orientation	Sizing	Tensile Strength		Tensile Modulus		Elongation		Density	
			Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper
rCF - Pyrolysis	Agglomerated	0%	620 Ksi	820 Ksi	33.4 Msi	40.0 Msi	1.70%	2.20%	1.7 g/cm^3	1.8 g/cm^3

Typical Range of Properties - SI Units

Fiber Type	Filament Orientation	Sizing	Tensile Strength		Tensile Modulus		Elongation		Density	
			Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper
rCF - Pyrolysis	Agglomerated	0%	4280 Gpa	5670 Gpa	230 Gpa	276 Gpa	1.70%	2.20%	1.7 g/cm^3	1.8 g/cm^3

Table 1 – Typical Range of Properties, rCF from Pyrolysis

The table below shows the most common carbon fiber manufacturers and products utilized in the creation of the feedstock materials CFR recycles to create rCF from pyrolysis (Table 2).

Manufacturer	Brand
Toray	T700
Hyosung	H2550
Hexcel	IM7
Hexcel	AS4
Thornel	T650
Teijin	Tenax

Table 2 –
Note – This list is not all inclusive of every manufacturer, brand and type of carbon fiber utilized in the creation of rCF

For further details on carbon fiber feedstock material properties, please refer to the original manufacturer's (referenced in table 2) TDS, typically located on the manufacturer's website.

For assistance in locating the original manufacturer's TDS, please contact Carbon Fiber Recycling directly at: info@carbonfiberrecycling.com