

EON PA-CF + CFR

EON PA-CF can be reinforced with continuous fibers, depending on each application. It is a versatile material both with and without reinforcing fibers.

Fiber Reinforcement				
Mechanical Properties	Carbon	Kevlar®	Fiberglass	Test Method
Tensile Strength	800 MPa	610 MPa	590 MPa	D3039
Tensile Modulus	60 GPa	27 GPa	21 GPa	
Tensile Strain at Break	1,5 %	2,7 %	3,8 %	
Flexural Strength	540 MPa	240 MPa	200 MPa	D790 (1)
Flexural Modulus	51 GPa	26 GPa	22 GPa	
Flexural Strain at Break	1,2 %	2,1 %	1,1 %	
Compressive Strength	420 MPa	130 MPa	180 MPa	D6641
Compressive Modulus	62 GPa	25 GPa	24 GPa	
Compressive Strain at break	0,7 %	1,5 %	-	
Notched Izod Impact	960 J/m	2000 J/m	2600 J/m	D256-10 A

Fiber Reinforcement				
Thermal Properties	Carbon	Kevlar®	Fiberglass	Test Method
Heat Deflection Temp.	105° C	105° C	105° C	D648 B

Fiber Reinforcement				
Other Properties	Carbon	Kevlar®	Fiberglass	Test Method
Density	1,4 g/cm³	1,2 g/cm³	1,5 g/cm³	-

Notes:

1) Measured by a method similar to ASTM D790. Composite Base -only parts do not break before end of flexural test.