

Vega™

PEKK BASED MATERIAL

Vega™ is a carbon fiber filled PEKK filament, well suited for applications demanding superior heat and FST (Flame, Smoke, Toxicity) resistance. Vega™ produces parts with a matte black surface finish. Engineered for Markforged’s Continuous Fiber Reinforcement process, Vega parts can be reinforced with continuous High Temperature Carbon Fiber.



Features and benefits

High heat and FST resistance

Reinforceable with continuous Carbon Fiber

Matte surface finish

Physical Properties	Unit	Test	Vega™	Test	High Temperature Carbon Fiber (CFR)
Tensile Strength	MPa (ksi)	D638	83 (12)	D3039	760 (110)
Tensile Modulus	GPa (ksi)	D638	5 (725)	D3039	57 (8280)
Elongation at Break	%	D638	4	D3039	–
Flexural Strength	MPa (ksi)	D790	130 (19)	D790	540 (78.3)
Flexural Modulus	GPa (ksi)	D790	4 (580)	D790	50 (7250)
Flexural Extension at Break	%	D790	10	D790	–
HDT (1.8 MPa)	deg C (deg F)	D648 B	157 (315)	D695	190 (374)
HDT (0.45 MPa)	deg C (deg F)	D648 B	164 (327)	D695	190 (374)

These representative data were tested, measured, or calculated using standard methods and are subject to change without notice. Markforged® makes no warranties of any kind, express or implied, including, but not limited to, the warranties of merchantability, fitness for a particular use, or warranty against patent infringement; and assumes no liability in connection with the use of this information. The data listed here should not be used to establish design, quality control, or specification limits, and are not intended to substitute for your own testing to determine suitability for your particular application. Nothing in this sheet is to be construed as a license to operate under or a recommendation to infringe upon any intellectual property right.