



Oxford Performance Materials

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High Performance Thermoplastic **OXPEKK®** Materials Medical Grades (MG) and Implant Grades (IG) – Carbon reinforced

MEDICAL GRADE			OXPEKK-MG210C		OXPEKK-MG230C		OXPEKK-MG240C	
IMPLANT GRADE			OXPEKK-IG210C		OXPEKK-IG230C		OXPEKK-IG240C	
PROPERTIES	English Unit	Metric Unit	10% Carbon Fiber		30% Carbon Fiber		40% Carbon Fiber	
Form			Pellets		Pellets		Pellets	
Specific Gravity	lb/cu-ft	g/cm ³	83.7	1.35	89.3	1.43	91.8	1.47
Linear Mold Shrinkage	in/in	%	-	-	.001	0.1	.0005	0.05
Water Absorption @ 24 hrs	%	%	<0.2	<0.2	<0.03	<0.03	<0.03	<0.03
MECHANICAL								
Tensile Strength (Break)	Kpsi	MPa	28	193	38	262	39	269
Tensile Modulus	Mpsi	GPa	1.6	11	4.1	28	5.0	35
Elongation (Break)	%	%	2	2	1	1	1	1
Flexural Strength	Kpsi	MPa	39	269	42	291	44	300
Flexural Modulus	Mpsi	GPa	1.4	9.6	3.2	22	4.3	30
Izod, Notched	ft-lbf/in	J/m	1	53.4	1	53.4	1.8	96.1
Compressive Strength	Kpsi	MPa	35	241	35	241	35	241
THERMAL								
Melting Point	°F	°C	680	360	680	360	680	360
Glass Transition	°F	°C	325	163	325	163	325	163
HDT @264 psi (1.8 MPa)	°F	°C	-	-	610	321	621	327
CTE (<Tg)	10-6/°F	10-6/°C	-	-	5.6	10.1	6	10.8
<i>All numbers represent typical values</i>								



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