

			Cheetah	NinjaFlex	Armadillo	Alloy 910	Nylon 645	ABS	PLA
General Properties									
	Method	Units							
Specific Gravity	D792	g/cc	1.22	1.19	1.18	1.11	1.08	1.05	1.25
Moisture Absorption - 24 hours	D570	%	0.18	0.22					
Mechanical Properties									
Tensile Strength, Yield	D638	psi	1250	580	3900	6700	3700	5100	7800
Tensile Strength, Ultimate	D638	psi	5650	3700	6900	5000	4600	5100	7800
Tensile Modulus	D638	psi	3800	1800	57500	96500	40000	143000	242000
Elongation at Yield	D638	%	55	65	18	13	13	8	6
Elongation at Break	D638	%	580	660	295	330	325	8	6
Toughness (integrated stress-strain curve)	D638	in·lbF/in3	17000	12000	14000	16000	12000	160	140
Hardness	D2240	Shore	95A	85A	75D	85D	85D	70D	75D
Impact Strength (notched Izod, 72°F)0.12"	D256	ft.lbf/in2	9.1	2.0	1.41	1.1	1.51	4.94	0.47
Abrasion Resistance (mass loss, 10,000 cycles)	D4060	g	0.06	0.08	0.03	0.29	0.3	0.10	0.25
Thermal Properties									
Melting Point	DSC	°C (°F)	220 (428)	216 (420)	212 (413)	200 (392)	200 (392)	--	155 (311)
Glass Transition	DSC	°C (°F)	-24 (-11)	-35 (-31)	-10 (14)	82 (180)	52 (125)	105 (221)	60 (140)
HDT @ 10.75 psi	D648	°C (°F)	74 (165)	60 (140)	46 (115)	130 (266)	111 (232)	103 (217)	64 (147)
HDT @ 66 psi	D648	°C (°F)	49 (120)	44 (111)	41 (106)	70 (158)		93 (200)	60 (140)

Warranty/Disclaimer: The performance characteristics of these products may vary according to product application, operating conditions, or with end use. NinjaTek makes no warranties of any type, express or implied, including, but not limited to, the warranties of merchant-ability or fitness for a particular use.