

			Cheetah	NinjaFlex	Armadillo	Alloy 910	Nylon 645	ABS	PLA
<b>General Properties</b>									
	<b>Method</b>	<b>Units</b>							
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					
<b>Mechanical Properties</b>									
Tensile Strength, Yield	D638	MPa	9	4	27	46	26	35	54
Tensile Strength, Ultimate	D638	MPa	39	26	48	34	32	35	54
Tensile Modulus	D638	MPa	26	12	396	665	276	986	1669
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	m*N/m <sup>3</sup> x10 <sup>6</sup>	117.2	82.7	96.5	110.3	82.7	1.1	1.0
Hardness	D2240	Shore	95A	85A	75D	85D	85D	70D	75D
Impact Strength (notched Izod, 72°F)0.12"	D256	kJ/m <sup>2</sup>	19.1	4.2	3.0	2.3	3.2	10.4	1.0
Abrasion Resistance (mass loss, 10,000 cycles)	D4060	g	0.06	0.08	0.03	0.29	0.3	0.10	0.25
<b>Thermal Properties</b>									
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)

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