

Product Description	Units	AS-10GF/000 FR V0 Black	AS-10GF/000 Natural	AS-10GF/000 Black	AS-30GF/000 Black	AT-15CF/000 Black	NL-10GF/000 Black	NL-20GF/000 Black	NN-20CF/000 Black	NN-40CF/000 FR V0 Natural	NY-20CF/000 Black	NY-20GF-10GB/000 Natural	5209 Black 30 A 1
Base Polymer		ABS	ABS	ABS	ABS	Acetal	PA6/12	PA6/12	PA66	PA66	PA6	PA6	Acetal
Specific Gravity (ASTM D792)		1.3	1.11	1.12	1.27	1.44	1.13	1.2	1.22	1.52	1.22	1.32	1.41
Mold Shrink, Linear-Flow	in/in	0.0015-0.0030	0.0020-0.0040	0.0020-0.0040	0.0010 - 0.0030	0.0010-0.0050	0.0050-0.0060	0.004-0.005	0.0005-0.0020	0.0002-0.0004	0.0002-0.0010	0.0020-0.0040	0.025-0.027
Mold Shrink, Transverse-Flow	in/in	0.0080-0.0090	0.0075-0.010	0.0075-0.010	0.0060-0.0080	0.010-0.030	0.009-0.017	0.009-0.017	0.017-0.019	0.007-0.016	0.012-0.014		
Water Absorption @ 24 hrs (ASTM D570)	%						0.35	0.2				1.2	0.2
Tensile Modulus (ASTM D638) 0.2 inch/min"	psi	680000	598000	590000	1300000	1750000	600000	900000	1850000	5500000	1760000	850000	365000
Tensile Strength at Break (ASTM D638)	psi	9300	8600	8500	11000	11700	12000	16000	24900	32000	23300	13500	
Tensile Elongation at Break (ASTM D638)	%	2 to 3	2 to 3	2 to 3	1 to 2	1 to 2	5	5	2.2	1	2.4	3	40
Flexural Modulus (ASTM D790) 0.05 inch/min	psi	650000	550000	570000	1080000	1265000	500000	750000	1730000	3800000	1550000	700000	365000
Flexural Strength (ASTM D790) 0.05 inch/min	psi	15000	13600	13800	16000	14000	19000	26000	33500	48000	34900	16000	13000
Notched Izod Impact (ASTM D256)	ft-lb/in	0.6	1.4	1.4	1	0.6	0.8	1	0.9	1.28	0.9	1.2	1.3
DTUL @ 66 psi - Unannealed (ASTM D648)	deg C	106	100	100	102	163	200	206	261		219	213	
DTUL @ 264 psi - Unannealed (ASTM D648)	deg C	99	91	90	96	153	175	185	250	245	205	207	97
Surface Resistivity (ASTM D257)	ohms/sq					E2-E4			E2-E4	E2-E4	E3-E5		
Volume Resistivity (ASTM D257)	ohm-cm					E2-E4			E2-E4	E2-E4	E3-E5		
Flame Rating - UL (UL 94)		V-0								V-0			
SAP Code		EM00904621	EM00906156	EM0A904625	EM00905438	EM10012575	EM0A906117	EM00905601	EM00905658	EM10010618	EM00905738	EM00902183	EM00904424

Product Description	Units	PC-30GF/000 Black	PC-30CF/000 Black	PI-30GF/000R Black	PS-20GF/000 Natural	PS-30CF/000 HF UV Black	SF2-40CF/000 Natural	TR2-10GF/000 Natural	TR2-10TA/000 Natural	TR2-30GF/000 Natural	TR2-30TA/000 Natural	UR2-40CF/000 Black
Base Polymer		PC	PC	PEI	PBT	PBT	PPS	Tritan	Tritan	Tritan	Tritan	Tritan
Specific Gravity (ASTM D792)		1.42	1.32	1.5	1.45	1.43	1.49	1.25	1.25	1.41	1.41	1.40
Mold Shrink, Linear-Flow	in/in	0.0010-0.0030	0.0001-0.0003	0.0010-0.0030	0.0030-0.0050	0.0002-0.0006	0.0002-0.0008	0.0020-0.0030	0.0030-0.0040	0.00010-0.00090	0.0020-0.0030	0.0005-0.0009
Mold Shrink, Transverse-Flow	in/in	0.002-0.005	0.0080-0.0090	0.0080-0.0090	0.0130-0.0150	0.0110-0.0130	0.0004-0.0008					0.0009-0.003
Water Absorption @ 24 hrs (ASTM D570)	%											
Tensile Modulus (ASTM D638) 0.2 inch/min	psi	1200000	2930000	1444000	981000	3170000	4430000	400000	330000	960000	670000	1350000
Tensile Strength at Break (ASTM D638)	psi	17000	25000	22700	14000	24000	30000	7700	5900	13000	7800	14300
Tensile Elongation at Break (ASTM D638)	%	3 to 4	1 to 2	2 to 3	3 to 5	1 to 2	1 to 2	13	58	3	5	7 to 11
Tensile Elongation at Yield (ASTM D638)								5	6	3	4	
Flexural Modulus (ASTM D790) 0.05 inch/min	psi	1060000	2468000	1300000	870000	2600000	3740000	400000	310000	880000	595000	1150000
Flexural Strength (ASTM D790) 0.05 inch/min	psi	27000	37000	32000	24000	37000	41000	15000	11000	20000	13000	19000
Notched Izod Impact (ASTM D256)	ft-lb/in	2.4	1.4	1.2	1.1	1	0.7	1	2	2	1	7
Unnotched Izod Impact (ASTM D256)	ft-lb/in							14	17	No Break		18
DTUL @ 66 psi - Unannealed (ASTM D648)	deg C	142	141		219	222		117	114	111	114	116
DTUL @ 264 psi - Unannealed (ASTM D648)	deg C	138	136	201	182	211	272	113	106	100	106	108
CLTE - Flow (-22 to 86°F) (ASTM E831)	in/in/deg F							0.000065	0.000081	0.000032	0.000049	
CLTE - Transverse (-22 to 86°F) (ASTM E831)	in/in/deg F							0.00011	0.000092	0.0001	0.000061	
Surface Resistivity (ASTM D257)	ohms/sq		E2-E4			E2-E4	E2-E4					E2-E4
Volume Resistivity (ASTM D257)	ohm-cm		E2-E4			E2-E4	E3-E5					E2-E4
Flame Rating - UL (UL 94)				V-0								
SAP Code		EM00904581	EM00905949	EM10013243	EM10008079	EM10013880	EM00906040	EM10016180	EM10016182	EM10016276	EM10016468	EM10012295

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