



## SYNLON (NYLON6)

Properties	STANDARD ASTM	Unit	KA4601/ KA4701 (NY-6- General)	KA3703 (NY6 GF15 FR V2)	KA4702 (NY 6 -GF10)	KA4706 (NY 6 -GF30)	KA1703 (NY 6 -GF15 FR V0)	KA1706 (NY6 - FR GF 30)	KA4721 (NY 6 - 10% Graphite)	KA1701 (NY 6 FR)	KA4703 (NY6-GF15)	KA4606 (NY6-UV GF30)
<b>Mechanical</b>												
Tensile Strength @ Yield 50 mm/min	D638	MPa	60 - 70	50 - 60	60-72	90 - 110	50 - 58	85-105	52 - 62	56-66	85 - 115	79 - 84
Tensile Elongation @ Yield	D638	%	10 - 12	6 - 10	5 - 10	8 - 14	6 -10	8 - 14	9 - 14	10 - 14	5 - 10	8 - 9
Flexural Strength 5 mm/min	D790	MPa	110 - 130	85 - 95	90-125	140-155	70 - 95	140-155	90 - 110	90-110	120-150	--
Flexural Modulus	D790	MPa	3000-4000	3000 - 5000	2700-4500	8000 - 10000	2600 - 4000	8000-10000	2800 - 3500	2800-3500	3800- 4800	--
Izod Notched Impact Strength	D256	J/m	65 - 90	90-120	30-45	45 - 65	80- 120	45-65	50 - 75	50-70	60 - 75	109 - 114
<b>Thermal</b>												
Heat Deflection Temperature Under Load (B)1.82MPa	D 648	C	65 - 75	72 - 90	85-95	195-207	72 - 80	95-107	65 - 75	68-75	85 - 95	208 - 212
Vicat Softening Temperature (B)	D 1525	C	220 - 230	-	-	240-250	--	240-250	210 - 220	225-240	-	--
<b>Others</b>												
Density	D 792	gms/cc	1.13-1.16	1.23 - 1.26	1.25-1.29	1.35-1.45	1.23 - 1.26	1.35-1.45	1.14-1.18	1.13-1.16	1.23 - 1.25	1.35 - 1.45
Flammability Test @ 3mm thickness	UL 94		----	V2	---	----	V0	V0	-----	V0	-----	--
Filler Content	D 5630	%	-	13 - 17	9 - 11	29 -31	13 - 17	29 -31	9 - 11	-	13 - 17	29 - 31

\* Typical values represent an average for the samples tested using standard procedures.

The data indicated are intended as guides and do not reflect product specifications for any particular property

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## SYNLON (NYLON 6,6)

Properties	STANDARD ASTM	Unit	JA4601/ JA4701 (NY-6,6- General)	JA4702 (Nylon6,6 GF 10)	JA4703 (NY- 6,6 GF15)	JA4704 (Ny-6,6 GF20)	JA4606/ JA4706 (NY-6,6 GF30)	JA4708 (NY-6,6 GF40)	JA1702 (NY6,6 FR V0 GF10)	JA1705 (Ny6,6 FR V0 GF25)	JA1706 (NYL6,6 FR V0 GF30)		
<b>Mechanical</b>													
Tensile Strength @ Yield 50 mm/min	D638	MPa	70 - 80	80-100	90 - 110	90 - 110	95 - 120	85-120	50 - 56	90 - 110	90 - 110		
Tensile Elongation @ Yield	D638	%	9 -15	7 - 13	7 - 13	7 - 13	7 - 13	6 - 11	4 - 8	6 - 10	6 - 10		
Flexural Strength 5 mm/min	D790	MPa	120 - 130	130-150	140-160	140-160	160-175	110-185	90-125	150 - 200	170 - 200		
Flexural Modulus	D790	MPa	4000 - 5000	6000-8000	6000 - 8000	6000 - 8000	8000-11000	8600-11600	2700-4500	8000-10000	8000-10000		
Izod Notched Impact Strength	D256	J/m	65 - 80	50-60	50 - 60	50 - 60	45 - 55	105-120	30-45	75 - 90	78 - 95		
<b>Thermal</b>													
Heat Deflection Temperature Under Load (B)1.82MPa	D 648	C	85 - 95	90-100	90 - 100	90 - 100	220-230	220-235	70 - 77	210 - 225	235 - 250		
Vicat Softening Temperature (B)	D 1525	C	245 - 255	255-265	255-265	255-265	250-260	250-265	-	-	-		
<b>Others</b>													
Density	D 792	gms/cc	1.13-1.15	1.22-1.27	1.22-1.27	1.22-1.27	1.35-1.45	1.40-1.48	1.19 - 1.22	1.29 - 1.33	1.32 - 1.36		
Flammability Test @ 3mm thickness	UL 94		----		----	----	----	----	V0	V0	V0		
Filler Content	D 5630	%	-	9 - 11	14 - 16	19 - 21	29 - 31	39 - 41	9 - 11	24 - 26	29 - 31		

\* Typical values represent an average for the samples tested using standard procedures.

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