





HALOGEN-FREE FLAME RETARDANT TPU / TPE / POE

	PROPERTY	Density	MFI	Tensile Strength	Elongation at break	LOI	Flame Retardancy	
GRADE	STANDARD	ASTM D792	ASTM D1238	ASTM D638	ASTM D638	ASTM D2863	UL94	Applications
	UNITS	g/cm³	g/10min	MPa	%	%	%	
SYN	THANE	oles, USB wire, audio, fibre optic cables, data transmission system, EV charging						
•	nthane 2895HM	1.19	-	28	650	-	-	Sheathing and jacketing material for telecommunication cables and wire (Polyester TPU, half matte-based)
•	nthane -1990G	1.18	-	30	660	-	-	Sheathing and jacketing material for electronic cables and wire (Polyester TPU, Glossy based)
•	nthane -5091M	1.19	-	28	700	-	-	Sheathing and jacketing material for electronic cables and wire (Polyester TPU, mattebased)
•	nthane -8895G	1.11	-	31	510	-	-	Sheathing and jacketing material for electronic cables and wire (Polyether TPU, glossybased)
-	nthane -1895M	1.11	-	31	500	-	-	Sheathing and jacketing material for electronic cables and wire (Polyether TPU, mattebased)
•	nthane -1890G	1.18	-	30	620	-	-	Sheathing and jacketing material for telecommunication cables and wire (Polyester TPU, glossy-based)
-	nthane 1895G FR	1.24	-	20	570	32	V0	HFFR TPU for Automotive EV charging cables and Windmill – LV/MV Tower and Loop Cable (Polyester TPU, glossy-based)
•	nthane 990HM FR	1.21	-	27	530	26	V2	HFFR TPU for Automotive EV charging cables and Windmill – LV/MV Tower and Loop Cable (Polyester TPU, half matte-based)
•	nthane 990M FR	1.20	-	14	400	31	V0	HFFR TPU for Automotive EV charging cables and Windmill – LV/MV Tower and Loop Cable (Polyether TPU, matte-based)
•	nthane 990HM FR	1.19	-	15	440	27	V2	HFFR TPU for Automotive EV charging cables and Windmill – LV/MV Tower and Loop Cable (Polyether TPU, half matte-based)







SYNFLAME	•	Synflame is a low smoke, halogen free, flame retardant thermoplastic material produced using unique non-toxic, non-hazardous and good processability.										
Synflame A9L-C1085N	1.04	1	13	650	1	V0	TPE HFFR used for insulation with excellent high & low temp resistance, weather & UV resistance, oil resistance, easy processing with excellent surface					
Synflame A9L-C5817N	1.03	2	14	670	-	V0	TPE HFFR used for sheathing and jacketing with excellent high & low temp resistance, weather & UV resistance, oil resistance, easy processing with excellent surface					
Synflame B9L-9013 UV	1.51	4	15	200	39	-	General purpose POE thermoplastic HFFR formulation for cable extrusion for insulation and sheathing with high flame resistance and excellent crack resistance					
Synflame B9L-9032 UV	1.54	4	13	160	42	-	POE thermoplastic HFFR formulation for cable extrusion for insulation and sheathing with higher LOI for higher flame resistance and good crack resistance					
Synflame B9L-9050 UV	1.60	4	10	125	44	-	POE thermoplastic HFFR formulation with outstanding LOI for excellent flame resistance and it is used for B2CA, CPR requirement for sheathing application					







ADVANCED POLYMER COMPOUND - POLYAMIDE/PVDF/PEBAX/PEEK

NYCOLON	-			•		•	ffers outstanding chemical, oil and fuel, hydrolysis resistance, and excellent eathings with optimal harsh weather resistance and termite resistance.
Nycolon A6L-12 UV M BLACK	1.02	8	1	> 50	1	-	Nylon 12 special compound suitable for flexible pipes, tubes and sheathing of "technical cables" with gas-tight with anti-termite properties
Nycolon A6L-12 UV	1.02	-	1	300	ı	-	Nylon 12 special compound suitable for pipes, tubes and sheathing of "technical cables" with gas-tight with anti-termite properties
Nycolon A6L-12 PHLY	1.01	6	-	> 50	-	-	PA12 material low plasticized, heat and UV stability, recommended for use in SAE J844 and DIN 74324 regulations for automotive hoses
Nycolon A6L-12 PHL	1.01	< 5	-	> 50	-	-	PA12 material plasticized, heat and UV stability, recommended for use in SAE J844 and DIN 74324 regulations for automotive hoses
Nycolon A6L-12 P26LVUK	1.03	> 20	-	> 50	-	-	PA12 low viscosity, plasticized heat and UV stability
Nycolon A6L-12 MP	1.02	-	50	300	-	-	Plasticized thermoplastic PA12 heat and UV stabilized compound that offers outstanding chemical oil, fuel and hydrolysis resistance. Flexible and suitable for big-sized cables.
Nycolon A6L-12 HIPHL	1.01	< 5	-	> 50	-	-	Plasticized thermoplastic PA12 material, high impact, heat and UV stability, recommended for use in SAE J844 and DIN 74324 regulations
Nycolon A6L-11	1.04	7	41	200	-	НВ	Polyamide 11 resin compound used for wire and cable and special tubing application

NYFLON	Nyflon is a thermoplastic PVDF base compound used as insulation on electrical wires and thin wall insulation for high-temperature applications up to 150 degrees centigrade								
Nyflon A3L-0512	1.78	10	40	300	44	V0	Thermoplastic PVDF compound used as insulation on electrical wires for its flexibility, low thermal conductivity, high chemical corrosion resistance and high dielectric strength		







NYFLEX	•			PEBAX mate eds in wire a			D hardness particularly suitable when sub-ambient temperature requirement
Nyflex 1004	1.22	6	34	700	20	-	High performance PEBAX material with a shore D of 56
Nyflex 2104	1.24	5	40	500	20	-	High performance PEBAX material with a shore D of 55, medium modulus, extrusion grade
Nyflex 3008	1.24	5	32	600	20	-	High performance PEBAX material with a shore D of 53
Nyflex TX 2500	1.09	25	18	750	20	НВ	High performance PEBAX material with a shore D of 25
Nyflex TX 3500	1.12	35	27	850	20	НВ	High performance PEBAX material with a shore D of 35
Nyflex TX 3500A	1.12	34	26	858	-	-	High performance PEBAX material with a shore D of 35
Nyflex TX 4600	1.16	34	34	792	20	НВ	High performance PEBAX material with a shore D of 46
Nyflex TX 5500	1.19	20	48	688	-	НВ	High performance PEBAX material with a shore D of 55
Nyflex TX 5600	1.19	30	45	700	20	НВ	High performance PEBAX material with a shore D of 56
Nyflex TX 5800	1.21	23	48	587	20	НВ	High performance PEBAX material with a shore D of 58
Nyflex TX 6300	1.23	23	49	556	20	НВ	High performance PEBAX material with a shore D of 63
Nyflex TX 7200	1.25	19	50	500	20	НВ	High performance PEBAX material with a shore D of 72







NYPEEK		_	-term oxida xtreme env		stability	for use in hi	gh temperature environments over prolonged durations for wire and cable
Nypeek PEEK M	1.30	-	100	45	-	V0	An ultra-high-performance, high- temperature up to -55 to 240 degrees centigrade, semi-crystalline material with excellent machinability, mechanical strength, dimensional stability, creep resistance and hydrolysis resistance, low hygroscopic and low thermal expansion coefficient. Suitable for use in magnet and wire insulation in oil & gas, automotive, aerospace, and electrical industries.

SYNERCLEAN		Synerclean is a special purging compound designed for CV line application MV and HV, facilitating batch cleaning, shut down and restart processes. It cleans up screw, head and die effectively to reduce machine downtime.										
Synerclean B2L-1034	1.07	-	-	-	-	-	Organic high-efficiency purging compound for MV & HV CCV line					
Synerclean B2L-1036	1.09	-	-	-	-	-	Inorganic high-efficiency purging compound for MV & HV CCV line					

SYNSTART		Synstart is a low-density thermoplastic unfilled polyethylene compound, designed for starting-up medium/high-voltage cable insulation extruders								
Synstart B2L-1035 LR	0.92	2	-	-	-	-	Low-reactivity start-up compound for MV & HV CCV line			







PERFORMANCE ADDITIVES

SYNFLOW	-	Synflow is used to improve the processing performance and modify surface properties, improving the processing performance, smoothen surface, reducing pre-crosslinking rate, and reduces extruder cleaning cycle.									
Synflow C 802	-	-	-	-	-	-	Pelletized formulation with 50% ultra-high molecular weight siloxane polymer dispersed in a universal carrier and it is used as a processing aids to improve cable surface and processing output				
Synflow C 803	-	-	-	-	-	-	Concentrated formulation with 65% ultra-high molecular weight siloxane polymer dispersed in a universal carrier and it is used as a processing aids to improve cable surface and processing output				

UV 70333	UV70333	is a con	centrated li	ght stabilizer	that offe	ers excellent U	V protection for Wire and Cables formulation
Synbatch UV Masterbatches 70333	-	-	-	-	-	-	General grade light stabilizer masterbatch with a synergistic combination of a polymeric HALS and UV absorber used in sheathing for wire and cable formulation for outstanding UV protection

MAXIRODENT	Maxirod	Maxirodent is a High Performance Anti-Rodent masterbatch concentrate, non-toxic, non-hazardous based on aversion repellent basis									
Maxirodent AR3303	0.95	3	-	-	1	-	High-performance, anti-rodent masterbatch concentrate that is non-toxic and non-hazardous based on aversion-repellence with low smell				
MATERMITAN	Matermi	Matermitan is a High Performance Anti-Termite masterbatch concentrate, non-toxic, non-hazardous based on aversion repellent basis									
Matermitan AT3300	1.21	8	-	-	-	-	High-performance, anti-termite masterbatch concentrate that is non-toxic and non-hazardous based on aversion-repellence with low smell				
MAXICOMBI		Maxicombi is a High Performance Anti-Rodent cum Anti-Termite masterbatch concentrate, non-toxic, non-hazardous based on aversion repellent basis									
Maxicombi AT 3300/AR3303	1.24	5	-	-	-	-	High-performance, anti-rodent cum anti-termite masterbatch concentrate that is non-toxic and non-hazardous based on aversion-repellence with low smell				