



*Engineering Plastics
Technical Presentation*

Product Overview

• TAROMID A

PA 66 resin

Available in different grades, UV and heat stabilized, glass fibres reinforced (also high impact), with glass beads, mineral fillers (talcum, kaolin, wollastonite), mixed fillers, impact modified, flame retardant UL94 V0 (also halogen free grades) with UL certification (yellow card) and in compliance with the french method NF F 16 - 101.

• TAROMID B

PA 6 resin

Available in different grades, UV and heat stabilized, glass fibres reinforced (also high impact), with glass beads, mineral fillers (talcum, kaolin, wollastonite), mixed fillers, impact modified, flame retardant UL94 V0 (also halogen free grades) with UL certification (yellow card).

• TARODUR, NILSAN

ABS resin

Available in different grades, for general purposes, UV stabilized, glass fibres reinforced, flame retardant UL94 V0 and HB with UL certification (yellow card).

• TAROLON

PC resin

Available in different grades, for general purposes, high flow, UV stabilized, glass fibres reinforced, flame retardant UL94 V0 (also halogen free grades) with UL certification (yellow card).

• TAROLOX

PBT resin

Available in different grades, UV and heat stabilized, glass fibres reinforced, with glass-beads, mineral charges, mixed fillers, impact modified, flame retardant UL94 V0 (also halogen free grades) with UL certification (yellow card).

PET resin

Available in different grades, heat stabilized, glass fibres reinforced, flame retardant UL94 V0 (also halogen free grades) with UL certification (yellow card).

• TAROBLEND

PC - ABS alloy

Available with different percentages of PC, UV stabilized, glass fibres reinforced, flame retardant UL94 V0 (also halogen free grades) with UL certification (yellow card).

• TAROLOY

PC - PBT alloy

Available with different percentages of PBT, UV stabilized, impact modified.

• TARONYL

PPO - PS alloy

Available in different grades, UV and heat stabilized, glass fibres reinforced.

• TECNOBLEND

PA - ABS alloy

Available in different grades, UV and heat stabilized, glass fibres reinforced, impact modified

• HAIPLEN - NILENE - NILFLEX

PP resin

Available as homopolymer and copolymer in different grades such as mineral filled, glass fibres reinforced, impact modified and flame retardant UL94 V2 and V0 (also halogen free grades) with UL certification (yellow card).

Physical Properties

	Property	Unit	Standard	Test Specimen dimension in mm
Physical	MFI	g/10'	ISO 1133	
	MFI (Conditions)	°C - kg	-	
	Filler content	%	ISO 3451	
	Density (23°C)	kg/dm ³	ISO 1183	
	Water Absorption (24h /23°C)	%	ISO 62	
	Water Absorption at Saturation	%	ISO 62	
	Mould Shrinkage (Parallel)	%	ISO 2577	
	Mould Shrinkage (Normal)	%	ISO 2577	
Mechanical	IZOD Notched Impact (+23°C)	J/m	ASTM D-256	127x12,7x3,2
	IZOD Notched Impact strength (-20°C)	J/m	ASTM D-256	127x12,7x3,2
	CHARPY Notched Impact (+23°C)	kJ/m ²	ISO 179/1eA	80x10x4
	CHARPY Unnotched Impact (+23°C)	kJ/m ²	ISO 179/1eU	80x10x4
	CHARPY Unnotched Impact (-20°C)	kJ/m ²	ISO 179/1eU	80x10x4
	Tensile Modulus	MPa	ISO 527	
	Elongation at Break	%	ISO 527	
	Tensile Break Strength	MPa	ISO 527	
	Tensile Yield Strength	MPa	ISO 527	
	Flexural Modulus	MPa	ISO 178	
Flexural Strength	MPa	ISO 178		
Thermal	VICAT Temperature (1kg)	°C	ISO 306	
	VICAT Temperature (5kg)	°C	ISO 306	
	Heat Deflection Temperature (0,45 MPa)	°C	ISO 75/B	
	Heat Deflection Temperature (1,82 MPa)	°C	ISO 75/A	
	Ball Pressure Test	°C	IEC 60695-10-2	
	Continuous service temperature (20.000 h)	°C	IEC 60216	
	Coefficient of linear thermal expansion	K ⁻¹	ISO 11359	
Electrical	Volume Resistivity	Ohm cm	ASTM D-257	
	Comparative Tracking Index - CTI (Method A)	Volt	IEC 60112	
	Comparative Tracking Index - CTI (Method B)	Volt	IEC 60112	
Flammability	Burning Behavior	Rating	UL 94	127x12,7xThickness
	Burning Behavior - Thickness	mm	-	
	Glow Wire Flammability Index - GWFI	°C	IEC 60695-2-12	60x60xThickness
	GWFI - Thickness	mm	-	
	Glow Wire Ignition Temperature - GWIT	°C	IEC 60695-2-13	60x60xThickness
	GWIT - Thickness	mm	-	
	Oxygen Index	%	ASTM D-2863	6,35x12,7x3,2



Approved by Underwriters Laboratories

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Engineering Plastics Technical Presentation

The Company Taro Plast S.p.A. was founded in 1979, with three production sites in Italy for a total area of 120.000 m², to serve the injection moulding market through a wide range of engineering compounds based on several resins such as polycarbonate (PC), alloys (PC/ABS, PC/PBT, PC/PET), polyamide (PA6, PA66), polyester (PBT, PET and blend), polypropylene (PP). The current yearly production capacity is about 55.000 metric tons.

The manufacturing facilities are equipped with the most modern production technology for plastic compounding of engineering products.

Taro Plast S.p.A. operates in the main European countries with direct sales branch-offices as well as with a sales representative network to be where our customer expect us to be. This presence on site enables us to react in a flexible and fast way according to the requirements of our customers.



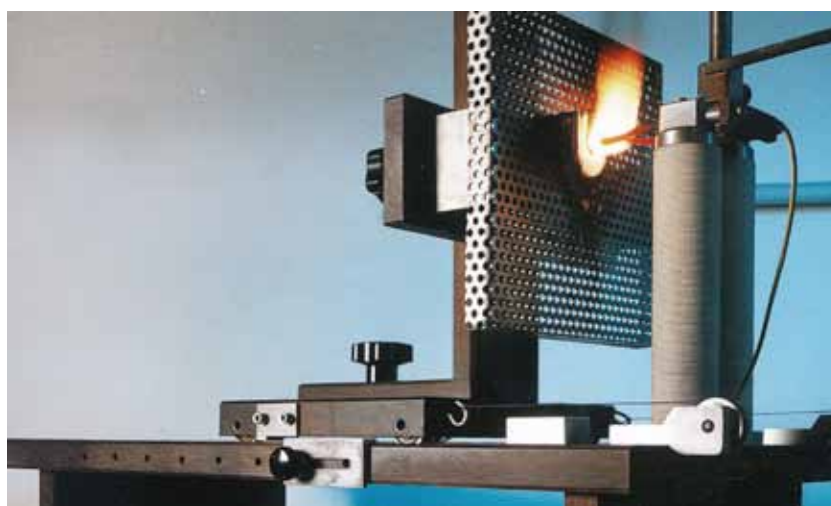
Company Presentation

A new project? A new component? A new design? A new application?

A flexible team of research chemists, laboratory workers, application-oriented technicians and engineers support our customers in the implementation of their requirements.

A continuous optimization of our production process ensures to our customers to experience quality, reliability of deliveries and commercial and technical services at a high level.

By the successful realization of an active quality management system as a living quality structure we have ensured that the confidence which our customers have in our products and services is continuously consolidated.



PA 66 Taromid A

• Unreinforced Taromid A 280 S	Taromid A 280	• Impact modified Taromid A 280 R1	Taromid A 280 R3	Taromid A 280 Z4	• Mineral filled Taromid A 280 MT 6	Taromid A 280 MT 8
18	18	30	6	3	12	10
280°C - 1 kg	280°C - 2,16 kg	280°C - 2,16 kg	280°C - 2,16 kg	280°C - 2,16 kg	280°C - 2,16 kg	280°C - 2,16 kg
-	-	-	-	-	30	40
1,13-1,14	1,13-1,14	1,10	1,07-1,09	1,06-1,08	1,36-1,38	1,45-1,47
1,0	1,0	0,8	0,75	1,2	0,6	0,4
7,0	7,0	6	5,5	6	5	4
1,6-2,0	1,6-2,0	1,4-2,0	1,3-1,8	1,50-1,7	0,8-1,1	0,4-0,6
1,6-2,0	1,6-2,0	1,5-2,0	1,3-1,8	-	0,8-1,1	0,4-0,6
35	42	70	250	900	40	38
24	30	50	140	750	-	-
3,4	4,0	4,5	-	90	4	3,5
-	-	-	N.B.	N.B.	25	26
-	-	-	N.B.	N.B.	18	-
3300	3100	-	-	-	7200	8000
40	60	65	80	>150	2,5	2
88	85	-	-	-	85	100
88	88	70	60	50	-	-
3250	3100	2200	2050	1900	7000	7500
130	130	95	85	-	150	170
254	254	-	-	-	-	-
240	240	220	215	214	235	240
-	-	-	-	-	-	-
90	90	75	70	66	190	200
165	165	165	-	125	205	205
90	90(130H)	80 (120 H)	-	-	80 (120 H)	80 (120 H)
8x10exp(-5)	8x10exp(-5)	-	-	7x10exp(-5)	4,5x10exp(-5)	3x10exp(-5)
9x10exp(15)	9x10exp(15)	-	-	10exp(15)	10exp(15)	10exp(15)
>600	>600	600	600	>600	600	600
600M	600M	-	-	-	400M	-
V2	V2	HB	HB	HB	HB	HB
1,6	1,6	1,6	1,6	1,6	1,6	1,6
750	750	650	-	-	750	750
2	2	2	-	-	2	2
-	-	-	-	-	-	-
-	-	-	-	-	-	-
26	26	24	23	-	26	27

• Unreinforced

TAROMID A 280 S

Polyamide 66 medium viscosity, general purpose.
Available: natural and colored dry blend (DB).

TAROMID A 280

Polyamide 66 medium viscosity, general purpose.
Available: different colours, release agent (W), UV stabilized (L), heat stabilized (H), laser printable (LP), improved glyco-hydrolysis stability (I).

• Impact modified

TAROMID A 280 R1

Polyamide 66 medium viscosity elastomer modified, good impact resistance.
Available: all colours, UV stabilized (L), release agent (W).

TAROMID A 280 R3

Polyamide 66 medium viscosity elastomer modified, very high impact resistance, low moisture absorption.
Available: all colours, UV stabilized (L), release agent (W).

TAROMID A 280 Z4

Polyamide 66 medium viscosity elastomer modified, very high impact resistance also at low temperatures, low moisture absorption.
Available: all colours, UV stabilized (L), release agent (W).

• Mineral filled

TAROMID A 280 MT6

Polyamide 66 medium viscosity 30% mineral filled.
Available: all colours, UV stabilized (L), heat stabilized (H), release agent (W).

TAROMID A 280 MT8

Polyamide 66 medium viscosity 40% mineral filled.
Available: all colours, UV stabilized (L), heat stabilized (H), release agent (W).

PA 66 Taromid A

• Reinforced Taromid A 280 G4	Taromid A 280 G5	Taromid A 280 G6	Taromid A 280 G7	Taromid A 280 G10	Taromid A 280 Z1 G6	Taromid A 280 G3 K3
14	12	12	10	5	8	15
280°C -2,16 kg	280°C -2,16 kg	280°C -2,16 kg	280°C -2,16 kg	280°C -2,16 kg	280°C -2,16 kg	280°C -2,16 kg
20	25	30	35	50	30	30
1,24-1,26	1,30-1,32	1,34-1,36	1,37-1,39	1,56-1,58	1,28-1,30	1,33-1,35
0,8	0,8	0,7	0,6	0,5-0,6	0,5	0,5
6	5,5	5	4,5	3	4,5	5,3
0,5-0,6	0,4-0,5	0,3-0,4	0,25-0,35	0,15-0,25	0,2-0,35	0,45-0,55
1,1-1,4	1,0-1,3	0,9-1,1	0,8-1,0	0,3-0,5	-	0,8-1,0
60	70	110	125	150	160	45
-	-	-	-	-	90	-
4,5	6	8	10	16	18	4,5
30	40	55	60	90	-	18
20	32	40	42	48	-	-
7200	8800	9600	10500	15500	8400	5700
4	3	2,4	2,2	1,5	4	5
130	146	175	190	220	140	100
-	-	-	-	-	-	-
6600	8500	9200	10000	15000	8000	5400
200	230	250	270	310	210	160
254	-	-	-	-	-	245
250	250	254	255	255	225	230
-	-	-	-	-	-	-
230	238	244	246	250	215	217
205	230	230	230	230	205	205
90 (130 H)	100 (130 H)	100 (130 H)	100 (130 H)	110 (130 H)	100 (130 H)	90 (130 H)
4x10exp(-5)	3,5x10exp(-5)	2,8x10exp(-5)	2,6x10exp(-5)	1,5x10exp(-5)	3,2x10exp(-5)	4x10exp(-5)
8x10exp(15)	8x10exp(15)	8x10exp(15)	8x10exp(15)	8x10exp(15)	8x10exp(15)	7x10exp(15)
500	500	550	550	550	500	500
-	-	-	-	-	-	300M
HB	HB	HB	HB	HB	HB	HB
0,75	0,75	0,75	0,75	0,75	1,6	1,6
750	750	750	750	750	650	750
2	2	2	2	2	2	2
-	-	-	-	-	-	-
-	-	-	-	-	-	-
26	26	27	27	27	24	26

• Reinforced

TAROMID A 280 G4

Polyamide 66 medium viscosity 20% glass fibres reinforced, flame rating UL94 HB (HW version).

Available: all colours, UV stabilized (L), heat stabilized (H), release agent (W).

TAROMID A 280 G5

Polyamide 66 medium viscosity 25% glass fibres reinforced, flame rating UL94 HB (HW version).

Available: all colours, UV stabilized (L), heat stabilized (H), release agent (W).

TAROMID A 280 G6

Polyamide 66 medium viscosity 30% glass fibres reinforced, flame rating UL94 HB (HW version).

Available: all colours, UV stabilized (L), heat stabilized (H), release agent (W), improved glycol-hydrolysis stability (I).

TAROMID A 280 G7

Polyamide 66 medium viscosity 35% glass fibres reinforced, flame rating UL94 HB (HW version).

Available: all colours, UV stabilized (L), heat stabilized (H), release agent (W).

TAROMID A 280 G10

Polyamide 66 medium viscosity 50% glass fibres reinforced, flame rating UL94 HB (HW version).

Available: all colours, UV stabilized (L), heat stabilized (H), release agent (W), improved glycol-hydrolysis stability (I).

TAROMID A 280 Z1 G6

Polyamide 66 medium viscosity 30% glass fibres reinforced, impact modified.

Available: all colours, UV stabilized (L), heat stabilized (H), release agent (W).

TAROMID A 280 G3 K3

Polyamide 66 medium viscosity 30% glass fibres/glass beads reinforced.

Available: all colours, UV stabilized (L), heat stabilized (H), release agent (W).

PA 66 Taromid A

• Flame retardant unreinforced Taromid A 280 X0	• Halogen free flame retardant unreinforced Taromid A 260 Y0	• Flame retardant reinforced Taromid A 280 G4 X0	Taromid A 280 G5 X0	Taromid A 280 H G6 X0	Taromid A 280 H G6 DX0 TR1	Taromid A 280 H G9 DX0 TR1	• Halogen free flame retardant reinforced Taromid A 280 G5 Y0
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	20	25	30	30	45	25
1,22-1,24	1,17	1,40-1,42	1,46-1,48	1,56-1,58	1,56-1,58	1,61-1,63	1,36
1,0-1,5	1,0-1,5	0,75	0,7	0,5	0,5	0,4	0,7
8	8	5,5	4,5	4,5	4,5	3	4,8
1,2-1,8	1,0-1,5	0,4-0,7	0,35-0,6	0,3-0,5	0,3-0,5	0,15-0,3	0,4-0,6
1,7-2,5	1,5-2,5	0,6-0,9	0,5-0,9	0,45-0,75	0,45-0,75	0,25-0,5	0,5-0,9
40	40	50	65	75	80	85	75
22	25	-	-	-	-	-	-
3,6	2,5	4	7	7,2	8	8,5	7
-	50	-	50	30	32	40	35
-	-	-	-	-	-	-	-
3300	3600	7600	8600	9200	9400	12000	8600
5	6	3,5	2,5	2,2	2,2	1,5	2,6
80	85	100	135	145	145	170	125
84	95	-	-	-	-	-	-
3100	3300	7000	7800	9000	9200	11000	8000
90	90	125	185	200	206	230	180
250	248	-	-	-	-	-	-
240	236	240	240	242	242	246	245
220	225	-	-	-	-	-	-
98	90	220	230	240	240	244	240
190	190	205	230	230	230	230	210
90 (120 H)	90 (120 H)	90 (130 H)	90 (130 H)	140	130	130	130
7,5x10exp(-5)	8x10exp(-5)	4,5x10exp(-5)	3x10exp(-5)	2,8x10exp(-5)	2,5x10exp(-5)	2x10exp(-5)	3x10exp(-5)
10exp(15)	10exp(15)	10exp(15)	10exp(15)	10exp(15)	10exp(15)	10exp(15)	-
375	>600	325	325	>400	>400	>400	600
-	-	-	-	-	>250M	-	-
V0	V0	V0	V0	V0	V0 – 5VA	V0	V0
0,88	0,55	0,88	0,88	0,75 (NAT-BK)	0,75 – 1,5	0,75 (NAT-BK)	0,85
960	960	960	960	960	960	960	960
1	1	1	1	1	0,75	1	3
825	775	850	850	850	850	875	775
1	1	1	1	1	0,75	1	3
30	32	32	32	34	35	36	30

• Flame retardant unreinforced

TAROMID A 280 X0

Polyamide 66 medium viscosity, flame retardant UL94 V0.
Available: all colours, heat stabilized (H), release agent (W).

• Halogen free flame retardant unreinforced

TAROMID A 260 Y0

PA66 medium viscosity, halogen free flame retardant UL94 V0.
Available: all colours.

• Flame retardant reinforced

TAROMID A 280 G4 X0

Polyamide 66 medium viscosity, 20% glass fibres reinforced, flame retardant UL94 V0.
Available: all colours, heat stabilized (H), release agent (W).

TAROMID A 280 G5 X0

Polyamide 66 medium viscosity, 25% glass fibres reinforced, flame retardant UL94 V0.
Available: all colours, heat stabilized (H), release agent (W).

TAROMID A 280 H G6 X0

Polyamide 66 medium viscosity, 30% glass fibres reinforced, flame retardant UL94 V0, heat stabilized. UL746 A (CTI ratings) and UL746 B (RTI ratings) approved.
Available: all colours.

TAROMID A 280 H G6 DX0 TR1

Polyamide 66 medium viscosity, 30% glass fibres reinforced, flame retardant UL94 V0, heat stabilized. UL746 A (HAI, HWI and CTI ratings) and UL746 B (RTI ratings) approved.
Available: all colours.

TAROMID A 280 H G9 DX0 TR1

Polyamide 66 medium viscosity, 45% glass fibres reinforced, flame retardant UL94 V0, heat stabilized. UL746 A (CTI ratings) and UL746 B (RTI ratings) approved.
Available: all colours.

• Halogen free flame retardant reinforced

TAROMID A 280 G5 Y0

Polyamide 66 medium viscosity, 25% glass fibres reinforced, halogen free flame retardant UL94 V0, heat stabilized. UL746 A (HAI, HWI and CTI ratings), GWFI and GWIT ratings approved.
Available: all colours.

PA 6 Taromid B

• Unreinforced Taromid B 280	• Impact modified Taromid B 280 R1	Taromid B 280 R3	Taromid B 280 Z4	• Mineral filled Taromid B 280 MT6	Taromid B 280 MT8	Taromid B 280 MG6	• Reinforced Taromid B 240 G3 MT5
13	10	8	5	8	8	15	-
250°C - 1,2 kg	250°C - 1,2 kg	250°C - 1,2 kg	250°C - 1,2 kg	250°C - 2,16 kg	250°C - 2,16 kg	250°C - 2,16 kg	-
-	-	-	-	30	40	30	40
1,13-1,14	1,11-1,13	1,08-1,10	1,06-1,08	1,36-1,38	1,46-1,48	1,36-1,38	1,47
2	1,8	0,8	0,6	0,9-1,0	0,8	0,85-0,95	0,7
9	8,5	6	5,5	6,5	5,5	6	5,5
1,1-1,6	1,1-1,6	1,1-1,6	1,0-1,5	0,4-0,6	0,3-0,6	0,8-1,0	0,25-0,4
1,1-1,6	1,1-1,6	1,1-1,6	1,1-1,6	0,4-0,6	0,3-0,6	0,8-1,0	0,3-0,5
50	75	500	800	42	40	45	55
30	-	450	730	-	-	-	-
3,2	4,5	40	85	4,5	3	4,4	4,5
N.B.	N.B.	N.B.	N.B.	30	28	56	-
-	-	N.B.	N.B.	-	-	30	-
2900	2750	2100	2000	6800	6200	6800	11500
100	100	120	>150	2,6	2,4	3	2,2
64	-	52	50	80	85	90	105
75	58	56	55	-	-	-	-
2750	2400	1900	1850	6500	5800	6500	8400
100	-	50	-	126	130	140	155
210	-	-	-	-	-	218	-
200	195	170	150	210	210	208	215
-	-	-	-	-	-	-	-
74	70	60	60	185	185	190	210
165	-	125	125	170	170	170	-
80 (120 H)	-	-	-	70 (110 H)	70 (110 H)	70 (110 H)	90 (130 H)
8x10exp(-5)	-	-	7x10exp(-5)	4,5x10exp(-5)	4,5x10exp(-5)	4,5x10exp(-5)	-
5x10exp(15)	5x10exp(15)	5x10exp(15)	3x10exp(15)	10exp(15)	10exp(15)	10exp(15)	10exp(15)
>600	600	600	600	600	600	425	-
600M	-	-	-	-	-	350M	-
V2	HB	HB	HB	HB	HB	HB	HB
1,6	1,6	1,6	1,6	1,6	1,6	1,6	1,6
750	-	-	-	750	750	650	-
2	-	-	-	2	2	2	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
23	23	-	-	24	24	24	-

• Unreinforced

TAROMID B 280

Polyamide 6 medium viscosity, general purpose.

Available: all colours also dry blend (DB), UV stabilized (L), heat stabilized (H), fast cycles (S), high heat stabilized (HT), release agent (W).

• Impact modified

TAROMID B 280 R1

Polyamide 6 medium viscosity elastomer modified, good impact resistance.

Available: all colours, UV stabilized (L), release agent (W).

TAROMID B 280 R3

Polyamide 6 medium viscosity elastomer modified, very high impact resistance, low moisture absorption.

Available: all colours, UV stabilized (L), release agent (W).

TAROMID B 280 Z4

Polyamide 6 medium viscosity elastomer modified, very high impact resistance also at low temperature, low moisture absorption.

Available: all colours, UV stabilized (L), release agent (W).

• Mineral filled

TAROMID B 280 MT6

Polyamide 6 medium viscosity 30% mineral filled.

Available: all colours, UV stabilized (L), heat stabilized (H), release agent (W).

TAROMID B 280 MT8

Polyamide 6 medium viscosity 40% mineral filled.

Available: all colours, UV stabilized (L), heat stabilized (H), release agent (W).

TAROMID B 280 MG6

Polyamide 6 medium viscosity 30% mineral filled.

Available: all colours, UV stabilized (L), heat stabilized (H), release agent (W), elastomer modified (R).

• Reinforced

TAROMID B 240 G3 MT5

Polyamide 6 low viscosity 40% glass fibres/mineral reinforced.

Available: all colours, UV stabilized (L), heat stabilized (H), release agent (W).

PA 6 Taromid B

• Reinforced Taromid B 280 G2	Taromid B 280 G3	Taromid B 280 G4	Taromid B 280 G5	Taromid B 280 G6	Taromid B 280 G7	Taromid B 280 G10
15	15	14	12	7	6	6
250°C - 2,16 kg	250°C - 2,16 kg	250°C - 2,16 kg	250°C - 2,16 kg	250°C - 2,16 kg	250°C - 2,16 kg	250°C - 2,16 kg
10	15	20	25	30	35	50
1,18	1,23	1,27	1,30 -1,32	1,34-1,36	1,37-1,39	1,56-1,58
1,5	1,3	1,1	1	0,9	0,8	0,6-0,7
7,6	7,2	7,0	6,5	6,0	6,0	4,2
0,6-0,9	0,4-0,5	0,4-0,5	0,3-0,4	0,25-0,35	0,2-0,3	0,1-0,2
0,9-1,2	0,8-1,0	0,7-0,9	0,6-0,8	0,5-0,65	0,45-0,6	0,3-0,4
55	60	70	100	120	135	155
-	-	-	-	-	-	-
5	5,5	6,2	7,5	10	14	18
-	35	38	42	46	50	60
-	25	28	32	36	40	52
4700	6100	6500	8300	9800	10500	14000
7	4	4	3,5	3	2,8	2
105	125	135	160	180	190	215
-	-	-	-	-	-	-
4500	5800	6000	8000	9400	9800	13500
120	150	170	240	270	280	340
214	210	216	-	-	-	-
205	205	208	210	212	214	218
-	-	-	-	-	-	-
90	190	190	200	205	208	218
-	-	-	-	>170	-	-
85 (120 H)	90 (130 H)	90 (130 H)	100 (130 H)	100 (130 H)	100 (130 H)	100 (130 H)
5x10exp(-5)	4,5x10exp(-5)	4x10exp(-5)	3,5x10exp(-5)	3x10exp(-5)	2,8x10exp(-5)	2,4x10exp(-5)
7x10exp(15)	7x10exp(15)	7x10exp(15)	7x10exp(15)	7x10exp(15)	7x10exp(15)	7x10exp(15)
500	500	500	550	550	550	550
-	-	-	-	-	-	-
HB	HB	HB	HB	HB	HB	HB
1,6	1,6	1,6	1,6	1,6	1,6	1,6
750	750	750	750	750	750	750
2	2	2	2	2	2	2
-	-	-	-	-	-	-
-	-	-	-	-	-	-
24	24	24	24	24	24	25

• Reinforced

TAROMID B 280 G2

Polyamide 6 medium viscosity 10% glass fibres reinforced.

Available: all colours, UV stabilized (L), heat stabilized (H), release agent (W).

TAROMID B 280 G3

Polyamide 6 medium viscosity 15% glass fibres reinforced.

Available: all colours, UV stabilized (L), heat stabilized (H), release agent (W).

TAROMID B 280 G4

Polyamide 6 medium viscosity 20% glass fibres reinforced.

Available: all colours, UV stabilized (L), heat stabilized (H), release agent (W).

TAROMID B 280 G5

Polyamide 6 medium viscosity 25% glass fibres reinforced.

Available: all colours, UV stabilized (L), heat stabilized (H), release agent (W).

TAROMID B 280 G6

Polyamide 6 medium viscosity 30% glass fibres reinforced.

Available: all colours, UV stabilized (L), heat stabilized (H), high heat stabilized (HT), release agent (W), laser printable (LP).

TAROMID B 280 G7

Polyamide 6 medium viscosity 35% glass fibres reinforced.

Available: all colours, UV stabilized (L), heat stabilized (H), release agent (W).

TAROMID B 280 G10

Polyamide 6 medium viscosity 50% glass fibres reinforced.

Available: all colours, UV stabilized (L), heat stabilized (H), release agent (W).

PA 6 Taromid B

• Flame retardant unreinforced Taromid B 280 X0	• Halogen free flame retardant unreinforced Taromid B 240 Y0	• Flame retardant reinforced Taromid B 280 G3 X0	Taromid B 280 G4 X0	Taromid B 280 G5 X0	Taromid B 280 G6 X0	• Halogen free flame retardant reinforced Taromid B 280 G5 Y0	Taromid B 240 G4 Y2	• Halogen free flame retardant mineral filled Taromid B 240 MT2 Y2
-	-	-	-	-	-	-	20	12
-	-	-	-	-	-	-	250°C - 2,16 kg	250°C - 2,16 kg
-	-	15	20	25	30	25	20	10
1,21-1,23	1,17	1,27-1,29	1,40-1,42	1,45-1,47	1,56-1,58	1,37-1,39	1,33	1,23
1,4-1,8	1,4-1,8	1,5	1,5	1,5	0,8	1,5	1,4	1,5
9	9	7,0	7,0	7,0	6	7,0	6,0	7,0
1,0-1,5	1,0-1,5	0,35-0,5	0,3-0,5	0,3-0,4	0,25-0,35	0,3-0,4	0,45	0,7
1,0-1,5	1,0-1,5	0,6-0,9	0,5-0,8	0,4-0,8	0,4-0,6	0,4-0,8	0,55	0,8
35	32	50	60	70	86	80	40	35
20	20	-	-	-	-	-	-	-
2,8	2,7	4,6	5,8	7	8,2	7,4	3	2,5
32	33	24	30	32	40	34	28	30
-	-	-	-	-	-	-	-	-
3200	3350	6600	7000	8400	9500	8400	5800	4100
6	8	3	3	2,6	2,2	2,6	2,7	4
66	62	115	120	125	130	125	82	72
82	77	-	-	-	-	-	-	-
3000	3100	6200	6500	8000	8700	8000	5500	3800
100	115	130	150	170	190	175	140	110
200	204	208	210	214	216	-	-	-
195	200	204	205	209	212	210	208	200
-	190	-	-	-	-	-	-	-
72	80	185	200	204	208	205	190	160
165	165	>170	>170	>170	>170	>170	175	170
100	100	110	120	120	120	120	120	110
10x10exp(-5)	8x10exp(-5)	4x10exp(-5)	3,8x10exp(-5)	3,5x10exp(-5)	3,2x10exp(-5)	-	2,5x10exp(-7)	-
10exp(15)	10exp(15)	10exp(15)	10exp(15)	10exp(15)	10exp(15)	-	10exp(13)	-
500	>600	200	300	325	400	600	600	600
-	-	-	-	-	-	-	-	-
V0	V0	V0	V0	V0	V0	V0	V2	V2
0,97	0,97	0,97	0,97	0,97	0,97	0,75	0,75	0,97
960	960	960	960	960	960	960	960	960
1	0,8	1	1	1	1	1	0,75	1
800	750	825	850	850	850	-	800	775
1,6	0,8	1,6	1,6	1,6	1,6	-	0,75	1
30	29	30	30	30	32	30	27	-

• Flame retardant unreinforced

TAROMID B 280 X0

Polyamide 6 medium viscosity, flame retardant UL94 V0.
Available: all colours, heat stabilized (H), release agent (W).

• Halogen free flame retardant unreinforced

TAROMID B 240 Y0

PA6 low viscosity, halogen free flame retardant UL94 V0, heat stabilized.
Available: all colours, heat stabilized (H).

• Flame retardant reinforced

TAROMID B 280 G3 X0

Polyamide 6 medium viscosity, 15% glass fibres reinforced, flame retardant UL94 V0.
Available: all colours, heat stabilized (H), release agent (W).

TAROMID B 280 G4 X0

Polyamide 6 medium viscosity, 20% glass fibres reinforced, flame retardant UL94 V0.
Available: all colours, heat stabilized (H), release agent (W).

TAROMID B 280 G5 X0

Polyamide 6 medium viscosity, 25% glass fibres reinforced, flame retardant UL94 V0.
Available: all colours, heat stabilized (H), release agent (W).

TAROMID B 280 G6 X0

Polyamide 6 medium viscosity, 30% glass fibres reinforced, flame retardant UL94 V0.
Available: all colours, heat stabilized (H), release agent (W).

• Halogen free flame retardant reinforced

TAROMID B 280 G5 Y0

Polyamide 6 medium viscosity, 25% glass fibres reinforced, halogen free flame retardant UL94 V0, heat stabilized.
Available: all colours.

TAROMID B 240 G4 Y2

Polyamide 6 low viscosity, 20% glass fibres reinforced, halogen free flame retardant UL94 V2, heat stabilized.
Available: all colours.

• Halogen free flame retardant mineral filled

TAROMID B 240 MT2 Y2

Polyamide 6 low viscosity, 10% mineral filled, halogen free flame retardant UL94 V2, heat stabilized.
Available: all colours.

ABS Tarodur, Nilsan

• Unreinforced							• Reinforced		• Flame retardant unreinforced	
Tarodur 70	Tarodur 100	Tarodur 130	Tarodur 150	Tarodur 100 MTR	Tarodur 100 TR	Nilsan S GP	Tarodur 100 G3	Tarodur 100 XO	Nilsan S VO NB L	
35	20	15	10	10	8	30	8	25	8	
220°C - 10 kg	220°C - 10 kg	220°C - 10 kg	220°C - 10 kg	220°C - 10 kg	220°C - 10 kg	220°C - 10 kg	220°C - 10 kg	220°C - 10 kg	220°C - 10 kg	
-	-	-	-	-	-	-	17	-	-	
1,04	1,04	1,04	1,04	1,05	1,05	1,04	1,17	1,18	1,18	
0,15	0,15	0,15	0,15	0,15	0,15	0,15	0,1	0,3	0,3	
-	-	-	-	-	-	-	0,4	0,7	0,7	
0,6-0,7	0,6-0,7	0,6-0,7	0,6-0,7	0,5-0,7	0,5-0,7	0,6-0,7	0,1-0,3	0,5-0,7	0,5-0,7	
0,6-0,7	0,6-0,7	0,6-0,7	0,6-0,7	0,5-0,7	0,5-0,7	0,6-0,7	0,3-0,5	0,5-0,7	0,5-0,7	
120	150	170	200	150	110	120	60	130	120	
-	-	-	-	-	-	-	40	50	-	
12	14	15	19	13	12	12	-	12	10	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
2400	2500	2400	2200	2500	2500	2500	5600	2700	2700	
20	25	30	40	35	35	30	2	10	8	
-	-	-	-	-	-	-	78	-	-	
46	48	45	45	47	47	44	-	46	42	
2300	2400	2300	2100	2500	2500	2550	5200	2500	2400	
65	66	60	60	67	70	-	-	70	65	
105	105	102	100	112	118	-	108	95	95	
95	95	93	92	105	112	96	104	90	90	
-	-	-	-	-	-	-	-	-	-	
85	85	85	88	100	102	85	96	80	74	
75	75	75	75	75	>100	75	100	75	75	
60	60	60	-	75	75	60	75	60	60	
9x10exp(-5)	9x10exp(-5)	9x10exp(-5)	9x10exp(-5)	8x10exp(-5)	8x10exp(-5)	8x10exp(-5)	4,5x10exp(-5)	5,5x10exp(-5)	5,5x10exp(-5)	
10exp(15)	10exp(15)	10exp(15)	10exp(15)	10exp(15)	10exp(15)	10exp(15)	10exp(15)	10exp(15)	10exp(15)	
-	-	-	-	-	-	600	-	>400	>400	
-	-	-	-	-	-	-	-	-	-	
HB	HB	HB	HB	HB	HB	HB	HB	VO	VO	
1,6	1,5	1,6	1,6	1,6	1,6	1,5	1,6	1,6	1,6	
650	650	650	650	650	550	650	550	960	960	
2	2	2	2	2	2	2	2	2	2	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
<21	<21	<21	<21	<21	<21	-	<21	27	-	

• Unreinforced

TARODUR 70

ABS very high flow, grade designed for low thickness walls and parts with big dimensions, good gloss.

Available: all colours, UV stabilized (L), heat stabilized (H), antistatic (AS).

TARODUR 100

ABS high flow, good gloss, flame rating UL94 HB.

Available: all colours, UV stabilized (L), heat stabilized (H), antistatic (AS).

TARODUR 130

Description: ABS medium flow, good gloss.

Available: all colours, UV stabilized (L), heat stabilized (H), antistatic (AS).

TARODUR 150

ABS medium-low flow, good gloss.

Available: all colours, UV stabilized (L), heat stabilized (H), antistatic (AS).

TARODUR 100 MTR

ABS improved thermal resistance grade.

Available: all colours, UV stabilized (L), heat stabilized (H), antistatic (AS).

TARODUR 100 TR

ABS improved thermal resistance grade.

Available: all colours, UV stabilized (L), heat stabilized (H), antistatic (AS).

NILSAN S GP

ABS high flow, good gloss, flame rating UL94 HB.

Available: all colours, UV stabilized (L).

• Reinforced

TARODUR 100 G3

ABS 17% glass fibres reinf orced, good dimensional stability, low shrinkage, designed according to FIAT 55234 – 90.40 method.

Available: all colours, UV stabilized (L), heat stabilized (H), antistatic (AS).

• Flame retardant unreinforced

TARODUR 100 XO

ABS flame retardant UL94 VO.

Available: all colours, UV stabilized (L), heat stabilized (H), antistatic (AS).

NILSAN S VO NB L

ABS flame retardant UL94 VO.

Available: all colours, UV stabilized (L), heat stabilized (H), antistatic (AS).

PC Tarolon

• Unreinforced				• Reinforced			
Tarolon 2000	Tarolon 2500	Tarolon 3000	Tarolon 2511	Tarolon 2500 G2	Tarolon 2500 G4	Tarolon 2500 G6	Tarolon 2500 G4 X1
22	18	10	15	12	12	10	12
300°C - 1,2 kg	300°C - 1,2 kg	300°C - 1,2 kg	300°C - 1,2 kg	300°C - 1,2 kg	300°C - 1,2 kg	300°C - 1,2 kg	300°C - 1,2 kg
-	-	-	-	10	20	30	20
1,20	1,20	1,20	1,20	1,24-1,26	1,33-1,35	1,42-1,44	1,33-1,35
0,12	0,12	0,12	0,12	0,08	0,08	0,05	0,08
0,35	0,35	0,35	0,35	0,3	0,25	0,20	0,25
0,5-0,7	0,5-0,7	0,5-0,7	0,5-0,7	0,3-0,5	0,3-0,5	0,1-0,3	0,3-0,5
0,5-0,7	0,5-0,7	0,5-0,7	0,5-0,7	-	-	-	-
600	600	750	700	150	125	135	125
-	-	-	-	135	115	115	115
20	25	35	30	10	9	9	9
>300	>300	>300	>300	45	42	44	42
>300	>300	>300	>300	40	38	38	-
2300	2300	2300	2300	3800	6000	8600	6000
80	85	100	85	6	4	3	4
-	-	-	-	70	90	105	90
60	62	70	62	75	-	-	-
2500	2500	2500	2500	3600	5500	8500	5500
80	85	88	80	105	155	200	155
148	150	152	150	153	153	154	153
143	145	-	-	146	147	148	147
-	-	-	-	-	-	-	-
140	140	140	140	142	142	145	142
125	125	125	135	135	135	135	135
120	120	120	120	130	135	135	135
7x10exp(-5)	7x10exp(-5)	7x10exp(-5)	7x10exp(-5)	3,5x10exp(-5)	3x10exp(-5)	2,5x10exp(-5)	3x10exp(-5)
>10exp(15)	>10exp(15)	>10exp(15)	>10exp(15)	>10exp(16)	>10exp(16)	>10exp(16)	>10exp(16)
225	225	225	225	150	175	150	175
-	-	-	-	-	100M	100M	-
V2	V2	V2	V2	V1	V1	V1	V1
1,6	1,6	1,6	1,6	3,2	1,6	1,6	1,6
850	850	850	850	850	850	850	960
2	2	2	2	2	2	2	1,6
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
26	26	26	26	30	31	32	31

• Unreinforced

TAROLON 2000

Polycarbonate medium-low viscosity, grade designed for low thickness walls.

Available: all colours, UV stabilized (L), release agent (W).

TAROLON 2500

Polycarbonate medium viscosity, standard grade for general purpose.

Available: all colours, UV stabilized (L), release agent (W).

TAROLON 3000

Polycarbonate medium-high viscosity, very good mechanical properties.

Available: all colours, UV stabilized (L), release agent (W).

TAROLON 2511

Polycarbonate medium viscosity, standard transparent grade for general purpose.

Available: only transparent colour, UV stabilized (L), release agent (W).

• Reinforced

TAROLON 2500 G2

Polycarbonate medium viscosity, 10% glass fibres reinforced.

Available: all colours, UV stabilized (L), release agent (W).

TAROLON 2500 G4

Polycarbonate medium viscosity, 20% glass fibres reinforced.

Available: all colours, UV stabilized (L), release agent (W).

TAROLON 2500 G6

Polycarbonate medium viscosity, 30% glass fibres reinforced.

Available: all colours, UV stabilized (L), release agent (W).

TAROLON 2500 G4 X1

Polycarbonate medium viscosity, 20% glass fibres reinforced, flame rating UL94 V1.

Available: all colours, UV stabilized (L).

PC Tarolon

• Unreinforced Tarolon 2020	Tarolon 2520	Tarolon 3020	• Flame retardant unreinforced Tarolon 2500 W X0	• Halogen free flame retardant unreinforced Tarolon 3000 W Y0	• Flame retardant reinforced Tarolon 2500 W G2 X0	Tarolon 2500 W G4 X0	Tarolon 2500 W G6 X0
22	18	10	-	10	-	-	-
300°C - 1,2 kg	300°C - 1,2 kg	300°C - 1,2 kg	-	300°C - 1,2 kg	-	-	-
-	-	-	-	-	10	20	30
1,20	1,20	1,20	1,22-1,24	1,20	1,26-1,28	1,35-1,37	1,44-1,46
0,12	0,12	0,12	0,1	0,12	0,08	0,08	0,05
0,35	0,35	0,35	0,35	0,35	0,25	0,25	0,20
0,5-0,7	0,5-0,7	0,5-0,7	0,5-0,7	0,5-0,7	0,3-0,5	0,25-0,35	0,15-0,2
0,5-0,7	0,5-0,7	0,5-0,7	0,5-0,7	0,5-0,7	0,45-0,65	0,4-0,6	0,3-0,4
600	600	750	600	650	150	125	110
-	-	-	-	-	120	-	-
20	25	35	30	30	12	10	9
>300	>300	>300	300	-	70	44	40
>300	>300	>300	-	-	60	38	34
2300	2300	2300	2300	2300	3500	6000	8000
80	85	100	60	70	8	4	2,5
-	-	-	60	-	65	75	100
60	62	70	70	-	75	80	-
2500	2500	2500	2500	2500	3700	5600	7800
80	85	88	90	-	110	120	145
148	150	152	148	150	152	156	158
143	145	-	144	145	146	148	152
-	-	-	-	-	-	-	-
140	140	140	130	130	135	148	148
125	125	125	125	125	135	135	135
-	120	120	120	120	130	130	130
7x10exp(-5)	7x10exp(-5)	7x10exp(-5)	7x10exp(-5)	-	3,3x10exp(-5)	3x10exp(-5)	2,3x10exp(-5)
>10exp(15)	>10exp(15)	>10exp(15)	>10exp(15)	-	>10exp(15)	>10exp(15)	>10exp(15)
225	225	225	200	225	175	150	150
-	-	-	100M	-	100M	100M	100M
V2	V2	V2	V0	V0	V0	V0	V0
1,6	1,6	1,6	0,97	3,2	0,97	0,97	0,97
850	850	850	960	960	960	960	960
2	2	2	2	2	2	2	2
-	-	-	850	-	-	-	-
-	-	-	1,6	-	-	-	-
26	26	26	34	>35	35	36	36

• Unreinforced TAROLON 2020

Polycarbonate low viscosity, grade designed for low thickness walls, flame rating UL94 V2.

Available: all colours, UV stabilized (L), release agent (W).

TAROLON 2520

Polycarbonate medium viscosity, standard grade for general purpose, flame rating UL94 V2.

Available: all colours, UV stabilized (L), release agent (W).

TAROLON 3020

Polycarbonate medium-high viscosity, very good mechanical properties, flame rating UL94 V2.

Available: all colours, UV stabilized (L), release agent (W).

• Flame retardant unreinforced TAROLON 2500 W X0

Polycarbonate medium viscosity, flame retardant UL94 V0.

Available: all colours, UV stabilized (L).

• Halogen free flame retardant unreinforced TAROLON 3000 W Y0

Polycarbonate medium-high viscosity, halogen free flame retardant UL94 V0.

Available: all colours, UV stabilized (L), heat stabilized (H).

• Flame retardant reinforced TAROLON 2500 W G2 X0

Polycarbonate medium viscosity, 10% glass fibres reinforced, flame retardant UL94 V0.

Available: all colours, UV stabilized (L).

TAROLON 2500 W G4 X0

Polycarbonate medium viscosity, 20% glass fibres reinforced, flame retardant UL94 V0.

Available: all colours, UV stabilized (L).

TAROLON 2500 W G6 X0

Polycarbonate medium viscosity, 30% glass fibres reinforced, flame retardant UL94 V0.

Available: all colours, UV stabilized (L).

PBT Tarolox 10

• Unreinforced Tarolox 10 W	• Impact modified Tarolox 10 Z3	• Reinforced Tarolox 10 G2	Tarolox 10 G4	Tarolox 10 G6	Tarolox 10 G10	Tarolox 10 Z1 G4	Tarolox 10 MT4 G6
20	10	27	20	17	8	-	7
250°C - 1,2 kg	250°C - 2,16 kg	250°C - 2,16 kg	250°C - 2,16 kg	250°C - 2,16 kg	250°C - 2,16 kg	-	250°C - 2,16 kg
-	-	10	20	30	50	20	50
1,30-1,32	1,24-1,26	1,37-1,39	1,45-1,47	1,53	1,69-1,71	1,44-1,46	1,75
0,08	0,05	0,05	0,05	0,05	0,05	0,05	0,05
0,5	0,3	0,3	0,25	0,24	0,2	0,25	0,5
1,6-1,8	0,9-1,1	0,7-1,1	0,4-0,6	0,25-0,55	0,2-0,3	0,4-0,6	0,25-0,4
1,6-1,8	1,0-1,2	0,9-1,3	0,6-1,0	0,5-1,0	0,5-0,7	0,6-1,0	0,6-0,9
50	600	55	70	80	100	80	50
30	-	-	60	-	-	-	-
4,5	-	4,5	6,5	8,5	13	-	4,5
-	-	40	-	-	-	-	-
-	-	-	-	-	-	-	-
2500	1900	4800	7000	9500	13500	6300	10500
50	>100	4,5	3	2,4	1,5	4	1,5
50	-	80	105	135	165	-	-
55	40	-	-	-	-	-	-
2300	1800	4500	6500	8500	12500	4000	9500
70	60	-	155	210	240	150	130
200	158	200	216	-	-	190	-
180	135	190	210	216	216	185	210
160	-	-	218	218	-	-	-
60	55	185	205	210	212	170	205
165	-	185	205	215	215	-	215
90 (120 H)	80	90 (130 H)	90 (130 H)	100 (140 H)	100 (140 H)	-	-
10x10exp(-5)	-	4x10exp(-5)	3,5x10exp (-5)	3x10exp(-5)	3x10exp(-5)	-	3x10exp(-5)
>10exp(15)	-	>10exp(15)	>10exp(15)	>10exp(15)	>10exp(15)	>10exp(15)	-
>600	>600	500	500	450	450	-	450
350M	-	-	200M	-	-	-	-
HB	HB	HB	HB	HB	HB	HB	HB
1,6	1,6	1,6	1,6	1,6	1,6	3,2	1,6
750	650	650	650	700	650	650	650
2	2	2	2	2	2	2	2
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
22	-	20	20	20	20	-	20

• Unreinforced

TAROLOX 10 W

PBT medium viscosity.

Available: all colours, heat stabilized (H), UV stabilized (L), release agent (W), fast cycles (S).

• Impact modified

TAROLOX 10 Z3

PBT medium viscosity, elastomer modified, high impact and good thermal properties.

Available: all colours, heat stabilized (H), UV stabilized (L), release agent (W).

• Reinforced

TAROLOX 10 G2

PBT medium viscosity, 10% glass fibres reinforced.

Available: all colours, heat stabilized (H), UV stabilized (L), release agent (W).

TAROLOX 10 G4

PBT medium viscosity, 20% glass fibres reinforced.

Available: all colours, heat stabilized (H), UV stabilized (L), release agent (W).

TAROLOX 10 G6

PBT medium viscosity, 30% glass fibres reinforced.

Available: all colours, heat stabilized (H), UV stabilized (L), release agent (W).

TAROLOX 10 G10

PBT medium viscosity, 50% glass fibres reinforced.

Available: all colours, heat stabilized (H), UV stabilized (L), release agent (W).

TAROLOX 10 Z1 G4

PBT medium viscosity, 20% glass fibres reinforced, impact modified.

Available: all colours, heat stabilized (H), UV stabilized (L), release agent (W).

TAROLOX 10 MT4 G6

PBT medium viscosity, 50% glass fibres/mineral reinforced, very good dimensional stability.

Available: all colours, heat stabilized (H), UV stabilized (L), release agent (W).

PBT Tarolox 10

• Flame retardant unreinforced Tarolox 10 X0	• Flame retardant reinforced Tarolox 10 G3 X0	Tarolox 10 G4 X0	Tarolox 10 H G6 X0	Tarolox 10 H G6 DX0	• Halogen free flame retardant unreinforced Tarolox GFR	• Halogen free flame retardant reinforced Tarolox GFR 2	Tarolox GFR 6
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	15	20	30	30	-	10	30
1,41-1,43	1,52-1,54	1,57-1,59	1,64-1,66	1,64-1,66	1,30	1,40	1,53
0,06	0,05	0,05	0,05	0,03	0,06	0,05	0,05
0,35	0,3	0,25	0,22	0,22	0,35	0,32	0,22
1,5-2,0	0,5-0,8	0,4-0,6	0,2-0,4	0,2-0,4	1,5-2,0	0,7-1,0	0,2-0,4
1,5-2,0	0,8-1,0	0,6-0,9	0,4-0,6	0,4-0,6	1,5-2,0	0,9-1,2	0,4-0,6
40	60	65	80	80	50	50	65
30	-	-	-	-	40	30	45
3,5	4,5	5,5	7	7	3,5	4,5	5,5
45	-	-	-	-	45	30	45
40	-	-	-	-	40	20	40
2900	5500	8000	10000	10000	3300	5100	10500
>50	4	3	2	2	-	4,2	1,9
55	95	110	125	120	-	70	100
60	-	-	-	-	68	-	-
2700	5500	7500	8500	9000	3000	4800	9000
48	140	165	200	210	45	105	140
205	210	215	-	-	-	-	-
190	205	210	215	215	194	205	208
-	210	215	215	215	-	-	-
75	190	205	210	210	160	180	215
165	215	215	215	215	165	185	215
90 (120 H)	90 (120 H)	90 (130 H)	140	130	-	-	-
9x10exp(-5)	3x10exp(-5)	3x10exp(-5)	2,7x10exp(-5)	2,5x10exp(-5)	-	-	-
>10exp(15)	>10exp(15)	>10exp(15)	>10exp(15)	>10exp(15)	-	-	-
275	250	250	250	250	600	600	550
175M	175M	175M	-	-	-	-	-
V0	V0	V0	V0	V0	V0	V0	V0
0,97	0,97	0,97	0,75 (NAT-BK)	0,75 (NAT-BK)	0,4	0,4	0,4
960	960	960	960	960	960	960	960
2	2	2	2	2	1	1	1
-	775	-	-	-	750	750	775
-	1	-	-	-	1	1	1
28	28	31	31	32	-	-	-

• Flame retardant unreinforced

TAROLOX 10 X0

PBT medium viscosity, flame retardant UL94 V0.
Available: all colours, heat stabilized (H), UV stabilized (L), release agent (W).

• Flame retardant reinforced

TAROLOX 10 G3 X0

PBT medium viscosity, 15% glass fibres reinforced, flame retardant UL94 V0.
Available: all colours, heat stabilized (H), UV stabilized (L), release agent (W).

TAROLOX 10 G4 X0

PBT medium viscosity, 20% glass fibres reinforced, flame retardant UL94 V0.
Available: all colours, heat stabilized (H), UV stabilized (L), release agent (W).

TAROLOX 10 H G6 X0

PBT medium viscosity, 30% glass fibres reinforced, flame retardant UL94 V0, heat stabilized. UL746 A (HAI, HWI and CTI ratings) and UL746 B (RTI ratings) approved.
Available: all colours, UV stabilized (L), release agent (W).

TAROLOX 10 H G6 DX0

PBT medium viscosity, 30% glass fibres reinforced, flame retardant UL94 V0, heat stabilized. UL746 A (HAI, HWI and CTI ratings) and UL746 B (RTI ratings) approved.
Available: all colours, UV stabilized (L).

• Halogen free flame retardant unreinforced

TAROLOX GFR

PBT medium viscosity, halogen free flame retardant UL94 V0, heat stabilized, high CTI value.
Available: all colours, UV stabilized (L).

• Halogen free flame retardant reinforced

TAROLOX GFR 2

PBT medium viscosity, 10% glass fibres reinforced, halogen free flame retardant UL94 V0, heat stabilized, high CTI value.
Available: all colours, UV stabilized (L).

TAROLOX GFR 6

PBT medium viscosity, 30% glass fibres reinforced, halogen free flame retardant UL94 V0, heat stabilized, high CTI value.
Available: all colours, UV stabilized (L).

PET Tarolox 111

• Reinforced Tarolox 111 G6	Tarolox 111 G9	• Flame retardant reinforced Tarolox 111 G4 DX0	Tarolox 111 G6 DX0	Tarolox 111 G4 DX03	Tarolox 111 G7 DX02	• Halogen free flame retardant reinforced Tarolox 111 G4 Y0	Tarolox 111 G6 Y0
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
30	45	20	30	20	33	20	30
1,55-1,57	1,68-1,70	1,58-1,60	1,66-1,68	1,58-1,60	1,72	1,52	1,59
0,05	0,04	0,06	0,05	0,06	0,06	0,05	0,05
-	-	-	-	-	-	-	-
0,2-0,3	0,15-0,25	0,3-0,4	0,2-0,3	0,3-0,4	0,2-0,3	0,3-0,5	0,2-0,3
0,5-0,7	0,4-0,6	0,8-1	0,5-0,7	0,8-1	0,6-0,8	0,5-0,8	0,5-0,7
85	115	70	85	60	70	65	85
70	90	58	70	-	-	50	70
9	11	8,5	9	-	-	5,5	8
46	60	40	46	35	-	36	42
-	-	-	-	-	-	-	-
10000	15500	8800	11000	7500	13000	8700	12300
2,5	2	2,5	2	2,5	2	2,1	1,6
135	185	120	135	120	-	95	105
-	-	-	-	-	-	-	-
9000	13500	8000	10000	7000	12000	8100	11000
220	280	190	220	150	190	130	150
-	-	-	-	-	-	-	-
240	245	235	240	235	246	235	237
246	248	244	246	-	-	-	-
225	230	215	225	230	243	228	235
245	245	245	245	245	245	245	245
140	140	140	150	140	150	150	150
3x10exp(-5)	2x10exp(-5)	2,4x10exp(-5)	2x10exp(-5)	2,4x10exp(-5)	-	3,3x10exp(-5)	2x10exp(-5)
10exp(15)	10exp(15)	10exp(15)	10exp(15)	10exp(15)	-	-	-
250	250	225	250	225	175	600	600
-	-	-	-	-	-	-	-
HB	HB	V0	V0	V0	V0	V0	V0
0,97	0,97	0,97	0,75	3,2	1,5	0,75	0,75
750	750	960	960	960	960	960	960
2	2	2	1	2	1	1	1
-	-	-	-	-	-	775	775
-	-	-	-	-	-	1	1
24	22	32	32	32	36	-	-

• Reinforced

TAROLOX 111 G6

PET medium viscosity, 30% glass fibres reinforced.
Available: all colours, heat stabilized (H), UV stabilized (L), release agent (W).

TAROLOX 111 G9

PET medium viscosity, 45% glass fibres reinforced.
Available: all colours, heat stabilized (H), UV stabilized (L), release agent (W).

• Flame retardant reinforced

TAROLOX 111 G4 DX0

PET medium viscosity, 20% glass fibres reinforced, flame retardant UL94 V0, designed according to RoHS Decree.
Available: all colours, heat stabilized (H), UV stabilized (L), release agent (W).

TAROLOX 111 G6 DX0

PET medium viscosity, 30% glass fibres reinforced, flame retardant UL94 V0.
Available: all colours, heat stabilized (H), UV stabilized (L), release agent (W).

TAROLOX 111 G4 DX03

PET medium viscosity, 20% glass fibres reinforced, flame retardant UL94 V0.
Available: all colours, heat stabilized (H), UV stabilized (L).

TAROLOX 111 G7 DX02

PET medium viscosity, 33% glass fibres reinforced, flame retardant UL94 V0, heat stabilized. UL746 A (HA, HWI and CTI ratings) and UL746 B (RTI ratings) approved, designed according to RoHS Decree.
Available: all colours, UV stabilized (L).

• Halogen free flame retardant reinforced

TAROLOX 111 G4 Y0

PET medium viscosity, 20% glass fibres reinforced, halogen free flame retardant UL94 V0, heat stabilized, designed according to RoHS Decree.
Available: all colours, UV stabilized (L).

TAROLOX 111 G6 Y0

PET medium viscosity, 30% glass fibres reinforced, halogen free flame retardant UL94 V0, heat stabilized, designed according to RoHS Decree.
Available: all colours, UV stabilized (L).

PC-ABS Taroblend

• Unreinforced
Taroblend 45

Taroblend 65

Taroblend 85

Taroblend 46

Taroblend 66

Taroblend 86

17	12	12	20	22	16
260°C - 5 kg	260°C - 5 kg	260°C - 5 kg	260°C - 5 kg	260°C - 5 kg	260°C - 5 kg
-	-	-	-	-	-
1,11-1,13	1,13-1,15	1,14-1,16	1,11-1,13	1,13-1,15	1,14-1,16
0,20	0,20	0,10	0,20	0,20	0,10
0,60	0,60	0,40	0,60	0,60	0,40
0,4-0,7	0,4-0,7	0,4-0,7	0,4-0,7	0,4-0,7	0,4-0,7
0,4-0,7	0,4-0,7	0,4-0,7	0,4-0,7	0,4-0,7	0,4-0,7
450	550	650	400	450	550
-	380	400	-	-	-
25	30	35	23	-	32
N.B.	N.B.	N.B.	N.B.	N.B.	N.B.
-	-	-	-	-	-
2000	2100	2200	2000	2100	2200
30	50	60	30	50	60
-	-	-	-	-	-
46	50	55	46	50	55
2150	2150	2200	2150	2250	2200
75	80	85	75	80	85
127	130	143	125	130	140
120	125	136	114	118	135
-	-	-	-	-	-
100	118	120	100	115	120
-	125	125	-	125	125
80	90	100	80	90	100
6,5x10exp(-5)	6,5x10exp(-5)	6,5x10exp(-5)	6,5x10exp(-5)	6,5x10exp(-5)	6,5x10exp(-5)
>10exp(15)	>10exp(15)	>10exp(15)	>10exp(15)	>10exp(15)	>10exp(15)
550	250	250	550	250	250
-	-	-	-	-	-
HB	HB	HB	HB	HB	HB
1,6	1,6	1,6	1,6	1,6	1,6
650	750	750	650	750	750
2	2	2	2	2	2
-	-	-	-	-	-
-	-	-	-	-	-
22	23	24	22	23	24

• Unreinforced

TAROBLEND 45

PC/ABS alloy medium thermal resistance, good flow and mechanical properties.

Available: all colours, UV stabilized (L).

TAROBLEND 65

PC/ABS alloy medium-high thermal resistance, good flow and mechanical properties, designed according to FIAT CR 110.500 and VW TL 522 31 method.

Available: all colours, UV stabilized (L).

TAROBLEND 85

PC/ABS alloy high thermal resistance, good flow and mechanical properties.

Available: all colours, UV stabilized (L).

TAROBLEND 46

PC/ABS alloy medium thermal resistance, very good flow and mechanical properties.

Available: all colours, UV stabilized (L).

TAROBLEND 66

PC/ABS alloy medium-high thermal resistance, very good flow and mechanical properties.

Available: all colours, UV stabilized (L).

TAROBLEND 86

PC/ABS alloy high thermal resistance, very good flow and mechanical properties.

Available: all colours, UV stabilized (L).

PC-ABS Taroblend

• Reinforced Taroblend 88 G2		• Flame retardant unreinforced Taroblend 45 X0		• Halogen free flame retardant unreinforced Taroblend 66 X0		
Taroblend 88 G4	Taroblend 50 X0	Taroblend 60 X0	Taroblend 65 X0	Taroblend 85 X0	Taroblend 88 G2	
12	10	-	-	15	-	50
260°C - 5 kg	260°C - 5 kg	-	-	260°C - 5 kg	-	260°C - 5 kg
10	20	-	-	-	-	-
1,19-1,21	1,24-1,26	1,16-1,18	1,17-1,19	1,19-1,21	1,18-1,20	1,20
0,10	0,10	0,25	0,25	0,3	0,20	0,1
0,29	0,25	0,65	0,65	0,7	0,60	0,4
0,3-0,5	0,2-0,4	0,4-0,7	0,4-0,6	0,4-0,6	0,4-0,7	0,4-0,7
0,4-0,6	0,3-0,5	0,4-0,7	0,4-0,6	0,4-0,6	0,4-0,7	0,4-0,7
90	100	350	350	450	450	500
30	-	-	-	-	-	-
9	10	18	20	22	20	20
25	30	N.B.	-	N.B.	N.B.	N.B.
-	-	-	-	-	-	-
4000	6000	2500	2600	2750	2500	2600
5	2	30	30	40	45	-
70	75	50	-	-	50	-
-	-	60	60	65	65	50
4000	5200	2400	2450	2550	2450	2100
100	110	80	85	90	85	70
140	-	120	116	122	125	142
134	134	108	-	-	115	135
-	-	-	-	-	-	-
120	118	96	85	88	110	110
125	125	-	75	75	125	125
100	-	60	60	60	60	-
4x10exp(-5)	4x10exp(-5)	7x10exp(-5)	7x10exp(-5)	7x10exp(-5)	7x10exp(-5)	-
>10exp(15)	>10exp(15)	>10exp(15)	-	-	>10exp(15)	-
150	200	200	-	-	200	>200
-	-	-	-	-	-	-
HB	HB	V0	V0	V0	V0	V0
1,6	1,6	1,7	1,7	1,7	1,7	1,7
650	650	960	960	960	960	960
2	2	2	2	2	2	2
-	-	-	-	-	-	-
-	-	-	-	-	-	-
24	24	32	32	32	32	-
						32

• Reinforced

TAROBLEND 88 G2

PC/ABS alloy, 10% glass fibres reinforced.
Available: all colours, UV stabilized (L).

TAROBLEND 88 G4

PC/ABS alloy, 20% glass fibres reinforced.
Available: all colours, UV stabilized (L).

• Flame Retardant unreinforced

TAROBLEND 45 X0

PC/ABS alloy medium thermal resistance, flame retardant UL94 V0.
Available: all colours, UV stabilized (L).

TAROBLEND 50 X0

PC/ABS alloy, medium-low thermal resistance, low halogen content flame retardant UL94 V0, without antimony trioxide.
Available: all colours, UV stabilized (L).

TAROBLEND 60 X0

PC/ABS alloy, medium thermal resistance, low halogen content flame retardant UL94 V0, without antimony trioxide.
Available: all colours, UV stabilized (L).

TAROBLEND 65 X0

PC/ABS alloy medium-high thermal resistance, flame retardant UL94 V0.
Available: all colours, UV stabilized (L).

TAROBLEND 85 X0

PC/ABS alloy high thermal resistance, flame retardant UL94 V0.
Available: all colours, UV stabilized (L).

• Halogen free flame retardant unreinforced

TAROBLEND 66 X0

PC/ABS alloy, medium thermal resistance, bromine, chlorine and antimony trioxide free flame retardant UL94 V0.
Available: all colours, UV stabilized (L).

PC-PBT Taroloy, PPO Taronyl, ABS-PA Tecnoblend

• Unreinforced Taroloy 10			• Reinforced Taronyl G4		• Unreinforced Tecnoblend B32		• Reinforced Tecnoblend B35 G2	
Taroloy 10	Taroloy 50	Taroloy 70	Taronyl G4	Taronyl G4	Tecnoblend B32	Tecnoblend B52	Tecnoblend B35 G2	Tecnoblend B45 G4
20	30	35	-	-	20	30	30	30
260°C - 5 kg	260°C - 5 kg	260°C - 5 kg	-	-	240°C - 10 kg	240°C - 10 kg	240°C - 10 kg	240°C - 10 kg
-	-	-	20	-	-	-	8	20
1,21	1,22	1,28	1,20-1,22	1,07	1,07	1,12	1,12	1,20
0,08	0,1	0,09	0,06	-	-	-	-	-
0,3	0,4	0,45	0,14	1,4	1,4	1,4	1,4	1,1
0,6-1	0,8-1,1	1,0-1,2	0,3-0,5	1,1	1,1	0,5	0,5	0,4
0,6-1	0,8-1,1	1,0-1,2	0,5-0,7	1,1	1,1	0,8	0,8	0,7
700	600	80	80	120	700	120	120	120
500	400	-	78	75	650	60	60	60
50	40	-	8	14	60	11	11	14
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
2150	2000	2300	6400	2300	2100	3100	3100	5400
>100	120	>100	3	40	>50	6	6	3
60	50	55	100	45	43	54	54	85
65	55	60	-	50	-	-	-	-
2300	-	2100	6000	2150	1850	2850	2850	4600
90	95	95	140	72	63	74	74	120
140	170	180	150	150	165	180	180	185
-	-	-	138	110	103	115	115	175
-	-	-	-	100	85	135	135	180
110	90	85	130	75	70	85	85	110
125	135	145	-	-	-	-	-	-
90	90	100	120	-	-	-	-	-
8x10exp(-5)	9,2x10exp(-5)	-	3,5x10exp(-5)	9x10exp(-5)	9x10exp(-5)	6x10exp(-5)	6x10exp(-5)	4x10exp(-5)
>10exp(15)	>10exp(14)	-	>10exp(15)	-	-	-	-	-
200	250	300	225	>600	>600	>600	>600	>600
-	-	-	-	-	-	-	-	-
HB	HB	HB	HB	HB	HB	HB	HB	HB
1,6	1,6	1,6	1,6	1,6	1,6	1,6	1,6	1,6
650	650	650	750	650	650	650	650	650
2	2	2	2	2	2	2	2	2
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	26	-	-	-	-	-

• Unreinforced

TAROLoy 10

PC/PBT alloy, very high impact strength.

Available: all colours, UV stabilized (L).

TAROLoy 50

PC/PBT alloy, good impact strength.

Available: all colours, UV stabilized (L).

TAROLoy 70

PC/PBT alloy, good impact strength combined with good chemical resistance.

Available: all colours, UV stabilized (L).

• Reinforced

TARONyL G4

PPO 20% glass fibres reinforced, very good water resistance.

Available: different colours.

• Unreinforced

TECNOBLEND B32

ABS/PA alloy combining good impact strength with chemical resistance.

Available: all colours, UV stabilized (L).

TECNOBLEND B52

ABS/PA alloy combining very high impact strength with chemical resistance.

Available: all colours, UV stabilized (L).

• Reinforced

TECNOBLEND B35 G2

ABS/PA alloy, 8% glass fibres reinforced, combining good impact strength with chemical resistance, designed according to European dir. 2000/53/EC (End-of-Life Vehicle).

Available: all colours, UV stabilized (L).

TECNOBLEND B45 G4

ABS/PA alloy, 20% glass fibres reinforced, combining good impact strength with chemical and thermal resistance, designed according to European dir. 2000/53/EC (End-of-Life Vehicle).

Available: all colours, UV stabilized (L).

PP Haiplen

• Mineral filled							
Haiplen H50 C6	Haiplen H50 T4	Haiplen H50 T8	Haiplen H90 T8	Haiplen H50 TC4	Haiplen H50 TC8	Haiplen EP70 C5	Haiplen EP90 T8
10	10	10	18	10	10	14	18
230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg
30	20	40	40	20	40	25	40
1,13	1,05	1,24	1,24	1,05	1,25	1,08	1,24
0,05	0,05	0,05	0,05	0,05	0,05	0,05	0,05
-	-	-	-	-	-	-	-
1,1	1,1	0,9	0,9	1,1	0,9	1,0	0,9
1,1	1,1	0,9	0,9	1,1	0,9	1,0	0,9
35	30	40	38	32	42	45	50
15	14	17	16	15	18	25	30
-	-	3,8	3,5	3	4	4,4	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
2200	2700	4100	4000	2600	3900	2000	2800
30	35	25	24	38	25	35	25
-	-	30	29	-	-	-	-
30	30	34	32	30	33	22	35
2200	2500	4000	3800	2400	3700	-	-
-	50	-	-	46	-	-	-
155	155	155	155	155	155	152	152
90	92	95	95	90	94	80	85
125	-	-	-	-	-	115	135
65	75	85	85	72	82	60	64
125	125	125	125	125	125	-	-
-	-	-	-	-	-	-	-
-	6x10exp(-5)	6x10exp(-5)	6x10exp(-5)	6x10exp(-5)	6x10exp(-5)	-	6x10exp(-5)
-	-	-	-	-	-	-	-
>600	>600	>600	>600	>600	>600	>600	>600
-	-	-	-	-	-	-	-
HB	HB	HB	HB	HB	HB	HB	HB
1,6	1,6	1,6	1,6	1,6	1,6	1,6	1,6
-	650	650	650	650	650	650	650
-	1,6	1,6	1,6	1,6	1,6	1,6	1,6
-	550	550	550	550	550	-	-
-	1,6	1,6	1,6	1,6	1,6	-	-
21	21	21	21	21	21	21	21

• Mineral filled

HAIPLEN H50 C6

Polypropylene homopolymer 30% calcium carbonate filled.
Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP), detergent stabilized (D).

HAIPLEN H50 T4

Polypropylene homopolymer 20% talcum filled.
Available: all colours, UV stabilized (L), heat stabilized (H).

HAIPLEN H50 T8

Polypropylene homopolymer 40% talcum filled.
Available: all colours, UV stabilized (L), heat stabilized (H).

HAIPLEN H90 T8

Polypropylene homopolymer high flow, 40% talcum filled.
Available: all colours, UV stabilized (L), heat stabilized (H).

HAIPLEN H50 TC4

Polypropylene homopolymer 20% talcum filled for aesthetic applications.
Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP).

HAIPLEN H50 TC8

Polypropylene homopolymer 40% talcum filled for aesthetic applications.
Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP), detergent stabilized (D).

HAIPLEN EP70 C5

Polypropylene copolymer 25% calcium carbonate filled.
Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP), detergent stabilized (D).

HAIPLEN EP90 T8

Polypropylene copolymer high flow, 40% talcum filled.
Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP), detergent stabilized (D).

PP Haiplen

• Reinforced

Haiplen H30 G4 BA	Haiplen H30 G6 BA	Haiplen H50 G6 BA	Haiplen H30 G10 BA	Haiplen H70 G4 MI2 BA	Haiplen EP30 Z1 G6 BA	Haiplen EP10 G3 BA	Haiplen EP100 K10 BA
6	6	10	4	14	7	5	18
230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg
20	30	30	50	30	30	15	50
1,04	1,12	1,12	1,34	1,13	1,12	1,00	1,35
0,10	0,10	0,10	0,10	0,20	0,10	0,10	0,05
-	-	-	-	-	-	-	-
0,35-0,65	0,2-0,4	0,2-0,4	0,2-0,35	0,2-0,4	0,35-0,50	0,5-0,7	0,6-0,8
0,85-0,95	0,7-0,9	0,7-0,9	0,4-0,55	0,4-0,6	0,60-0,75	0,8-1,0	0,6-0,8
75	130	100	140	70	150	100	60
30	75	60	70	-	80	45	20
-	-	-	-	-	-	-	-
-	70	55	78	40	-	-	-
-	-	-	-	-	-	-	-
4600	5900	5800	8800	4400	4000	3300	3200
7	4	4	3	-	5	5,5	6
65	92	90	110	70	70	56	-
-	-	-	-	-	-	-	-
4300	5800	5600	7700	4200	-	2800	2600
-	125	-	140	95	-	72	50
155	155	155	158	150	150	-	145
135	140	135	140	125	100	100	90
142	-	-	-	155	-	-	-
130	147	145	150	145	140	125	-
125	125	125	125	125	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
>600	>600	>600	>600	>600	>600	>600	>600
-	-	-	-	-	-	-	-
HB	HB	HB	HB	HB	HB	HB	HB
1,6	1,6	1,6	1,6	1,6	1,6	1,6	1,6
650	650	650	650	650	650	650	650
1,6	1,6	1,6	1,6	1,6	1,6	1,6	1,6
550	550	550	550	550	550	550	550
1,6	1,6	1,6	1,6	1,6	1,6	1,6	1,6
20	20	20	21	20	20	20	20

• Reinforced

HAIPLEN H30 G4 BA

Polypropylene homopolymer 20% glass fibres reinforced, chemically coupled, good mechanical properties.

Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP), detergent stabilized (D).

HAIPLEN H30 G6 BA

Polypropylene homopolymer 30% glass fibres reinforced, chemically coupled, good mechanical properties.

Available: all colours, UV stabilized (L), heat stabilized (H), high heat stabilized (HT), laser printable (LP), detergent stabilized (D).

HAIPLEN H50 G6 BA

Polypropylene homopolymer high flow, 50% glass fibres reinforced, chemically coupled, good mechanical properties.

Available: all colours, UV stabilized (L), heat stabilized (H), high heat stabilized (HT), laser printable (LP), detergent stabilized (D).

HAIPLEN H30 G10 BA

Polypropylene homopolymer 50% glass fibres reinforced, chemically coupled, very good mechanical properties.

Available: all colours, UV stabilized (L), heat stabilized (H), high heat stabilized (HT), laser printable (LP), detergent stabilized (D).

HAIPLEN H70 G4 MI2 BA

Polypropylene homopolymer 30% glass fibres/mineral reinforced, chemically coupled, good mechanical properties.

Available: all colours, UV stabilized (L), heat stabilized (H), high heat stabilized (HT), laser printable (LP), detergent stabilized (D).

HAIPLEN EP30 Z1 G6 BA

Polypropylene copolymer 30% glass fibres reinforced, chemically coupled, very high impact strength also at medium-low temperatures.

Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP), detergent stabilized (D).

HAIPLEN EP10 G3 BA

Polypropylene copolymer 15% glass fibres reinforced, chemically coupled, very good impact strength also at medium-low temperatures.

Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP), detergent stabilized (D).

HAIPLEN EP100 K10 BA

Polypropylene copolymer 50% glass beads reinforced, chemically coupled, high flow and very high dimensional stability.

Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP), detergent stabilized (D).

PP Haiplen

• Flame retardant unreinforced			• Flame retardant mineral filled		
Haiplen H50 X2	Haiplen H89 X2	Haiplen H90 X2	Haiplen EP50 T2 X2	Haiplen H90 TX2	Haiplen H50 T4 X0
10	15	22	14	20	12
230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg
-	-	-	10	10	20
0,96	0,96	0,96	1,03	1,02	1,33
0,03	0,05	0,03	0,05	0,05	0,05
-	-	-	-	-	0,10
1,3	1,3	1,3	1,2	1,2	1,1
1,3	1,3	1,3	1,2	1,2	1,1
35	40	35	80	40	40
25	25	25	30	-	10
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
1700	-	1600	1900	1800	2500
80	80	40	30	700	10
-	-	-	-	-	-
25	25	25	30	30	25
1500	1500	1500	1700	1600	2300
-	-	-	-	-	-
155	155	155	152	155	155
90	90	90	80	95	95
120	120	120	125	120	130
65	65	65	65	70	100
-	-	-	125	125	125
65	-	65	-	-	85
-	-	-	-	-	-
-	-	-	-	-	-
600	>600	600	600	>600	600
-	-	-	-	-	-
V2	V2	V2	V2	V2	V0
1,5	1,5	1,5	1,6	1,6	1,5
960	960	960	960	850	960
1,0	1,0	1,0	1,6	1,0	1
775	775	775	-	-	775
1,0	1,0	1,0	-	-	3
26	26	26	26	26	30

• Flame retardant unreinforced

HAIPLEN H50 X2

Polypropylene homopolymer medium flow, flame retardant UL94 V2. GWFI and GWIT ratings approved.

Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP), detergent stabilized (D).

HAIPLEN H89 X2

Polypropylene homopolymer medium-high flow, flame retardant UL94 V2. GWFI and GWIT ratings approved.

Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP), detergent stabilized (D).

HAIPLEN H90 X2

Polypropylene homopolymer high flow, flame retardant UL94 V2. GWFI and GWIT ratings approved.

Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP), detergent stabilized (D).

• Flame retardant mineral filled

HAIPLEN EP50 T2 X2

Polypropylene copolymer, 10% talcum filled, flame retardant UL94 V2.

Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP), detergent stabilized (D).

HAIPLEN H90 TX2

Polypropylene homopolymer high flow, 10% talcum filled, flame retardant UL94 V2.

Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP), detergent stabilized (D).

HAIPLEN H50 T4 X0

Polypropylene homopolymer, 20% talcum filled, flame retardant UL94 V0, designed according to RoHS Decree.

Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP), detergent stabilized (D).

PP Haiplen

• Halogen free flame retardant unreinforced Haiplen EP10 Y2	Haiplen EP80 Y2	Haiplen H50 Y2	Haiplen H50 Y0	• Flame retardant reinforced Haiplen H30 G6 BA X0	• Halogen free flame retardant reinforced Haiplen H30 G4 BA Y0	Haiplen H30 G6 BA Y0
2	9	10	10	6	7	6
230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg
-	-	-	-	-	20	30
1,09	1,03	0,97	1,05	1,29	1,17	1,26
0,05	0,05	0,05	0,08	0,05	0,05	0,05
-	-	-	-	0,15	0,15	-
1,3	1,3	1,3	1,2	0,3-0,4	0,25-0,45	0,2-0,4
1,3	1,3	1,3	1,2	0,45-0,6	0,6-0,8	0,4-0,6
170	40	32	30	50	65	95
-	-	10	10	-	-	-
-	-	-	-	5	6	9
-	-	-	-	-	32	40
-	-	-	-	-	-	-
-	-	1900	2200	-	5000	6100
50	50	25	10	3	3,1	2
-	-	-	-	40	70	75
30	35	30	25	-	-	-
1200	2000	1800	2000	4200	4600	6100
-	-	-	-	-	95	100
138	138	155	155	-	-	-
63	90	95	95	125	137	138
94	-	125	130	-	-	-
53	60	90	90	135	146	148
-	-	125	125	125	125	125
85	90	85	85	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
>600	600	600	600	600	>600	>600
-	-	-	-	-	-	-
V2	V2	V2	V0	V0 - 5VA	V0	V0
0,97	1,6	1,6	1,6	1,5 - 3,0	1,6	1,6
750	850	960	960	960	960	960
1,0	1,0	1	1	1	1,6	1,6
-	775	-	725	775	725	-
-	1,0	-	1,6	1,0	1,6	-
25	25	27	28	-	-	-

• Halogen free flame retardant unreinforced

HAIPLEN EP10 Y2

Polypropylene copolymer, halogen free flame retardant UL94 V2. Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP).

HAIPLEN EP80 Y2

Polypropylene copolymer, halogen free flame retardant UL94 V2. UL746 A (HA), HWI and CTI ratings), GWFI and GWIT ratings approved, designed according to RoHS Decree. Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP).

HAIPLEN H50 Y2

Polypropylene homopolymer, halogen free flame retardant UL94 V2. Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP).

HAIPLEN H50 Y0

Polypropylene homopolymer, halogen free flame retardant UL94 V0. Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP), detergent stabilized (D).

• Flame retardant reinforced

HAIPLEN H30 G6 BA X0

Polypropylene homopolymer, 30% glass fibres reinforced, chemically coupled, flame retardant UL94 V0-5VA, very good mechanical properties, designed according to RoHS Decree.

Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP), detergent stabilized (D).

• Halogen free flame retardant reinforced

HAIPLEN H30 G4 BA Y0

Polypropylene homopolymer 20% glass fibres reinforced chemically coupled, halogen free flame retardant UL94 V0, heat stabilized. Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP), detergent stabilized (D).

HAIPLEN H30 G6 BA Y0

Polypropylene homopolymer 30% glass fibres reinforced chemically coupled, halogen free flame retardant UL94 V0, heat stabilized. Available: all colours, UV stabilized (L), heat stabilized (H), laser printable (LP), detergent stabilized (D).

PP Nilene

• Unreinforced Nilene P	Nilene E	• Mineral filled Nilene P K20T	Nilene P K40T	Nilene E K20T	Nilene E K40T	• Reinforced Nilene P K30VA S	Nilene P K50VA S
10	10	10	15	10	12	4	4
230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg
-	-	20	40	20	40	30	50
0,92	0,91	1,05	1,24	1,05	1,24	1,12	1,34
0,03	0,02	0,05	0,05	0,05	0,05	0,10	0,10
-	-	-	-	-	-	-	-
1,5	1,5	1,1	0,9	1,1	0,9	0,2-0,4	0,2-0,35
1,5	1,5	1,1	0,9	1,1	0,9	0,7-0,9	0,4-0,55
40	100	35	30	55	45	100	130
-	-	-	20	-	-	70	75
-	-	-	3,5	5,2	-	-	-
-	-	-	-	-	-	70	72
-	-	-	-	-	-	-	-
-	-	-	4100	-	2900	6200	9000
80	30	30	25	32	27	3,5	2,7
-	-	-	27	-	-	90	110
25	27	32	31	30	28	-	-
1500	1100	2600	4000	1900	2700	5700	7700
-	-	50	-	-	-	125	138
90	-	155	155	152	152	155	156
-	75	90	95	80	80	142	144
125	-	-	-	130	-	-	-
60	-	75	85	60	68	145	150
-	-	125	125	-	125	125	125
-	-	-	-	-	-	-	-
-	-	6x10exp(-5)	6x10exp(-5)	6x10exp(-5)	6x10exp(-5)	-	-
-	-	-	-	-	-	-	-
>600	>600	>600	>600	>600	>600	>600	>600
-	-	-	-	-	-	-	-
HB	HB	HB	HB	HB	HB	HB	HB
1,6	1,6	1,6	1,6	1,6	1,6	1,5	0,75
-	-	650	650	650	650	650	650
-	-	1,6	1,6	1,6	1,6	1,6	1,6
-	-	550	550	-	-	550	550
-	-	1,6	1,6	-	-	1,6	1,6
-	-	21	21	21	21	20	21

• Unreinforced

NILENE P

Polypropylene homopolymer, flame rating UL94 HB.
Available: all colours, UV stabilized (L), heat stabilized (S), laser printable (YT), detergent stabilized (D).

NILENE E

Polypropylene copolymer, flame rating UL94 HB.
Available: all colours, UV stabilized (L), heat stabilized (S), laser printable (YT), detergent stabilized (D).

• Mineral filled

NILENE P K20T

Polypropylene homopolymer 20% talcum filled, flame rating UL94 HB.
Available: all colours, UV stabilized (L), heat stabilized (S), laser printable (YT), detergent stabilized (D).

NILENE P K40T

Polypropylene homopolymer 40% talcum filled, flame rating UL94 HB.
Available: all colours, UV stabilized (L), heat stabilized (S), laser printable (YT), detergent stabilized (D).

NILENE E K20T

Polypropylene copolymer 20% talcum filled, flame rating UL94 HB.
Available: all colours, UV stabilized (L), heat stabilized (S), laser printable (YT), detergent stabilized (D).

NILENE E K40T

Polypropylene copolymer 40% talcum filled, flame rating UL94 HB.
Available: all colours, UV stabilized (L), heat stabilized (S), laser printable (YT), detergent stabilized (D).

• Reinforced

NILENE P K30VA S

Polypropylene homopolymer 30% glass fibres reinforced, chemically coupled, heat stabilized, very good mechanical properties. Flame rating UL94 HB.
Available: all colours, UV stabilized (L), laser printable (YT), detergent stabilized (D).

NILENE P K50VA S

Polypropylene homopolymer 50% glass fibres reinforced, chemically coupled, heat stabilized, very good mechanical properties. Flame rating UL94 HB.
Available: all colours, UV stabilized (L), laser printable (YT), detergent stabilized (D).

PP Nilene

• Flame retardant unreinforced Nilene E V2	Nilene E V2 LBAF	• Flame retardant mineral filled Nilene E K20T V0 WOD	Nilene E K10T V2	• Halogen free flame retardant unreinforced Nilene E V0 LSZH	• Flame retardant reinforced Nilene P K30VA V0
10	-	10	15	20	5
230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg
-	-	20	10	-	30
0,95	0,93	1,34	1,01	1,05	1,40
0,05	0,05	0,05	0,05	0,1	0,05
-	-	0,10	-	-	-
1,3	1,4	1,1	1,2	1,2	0,1-0,5
1,3	1,4	1,1	1,2	1,2	0,4-0,8
100	70	33	50	50	65
-	-	-	30	25	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	1800	-	-
60	100	>15	40	20	3
-	-	24	28	-	-
30	-	-	30	21	70
1200	1400	2750	1600	1750	6500
-	-	-	-	-	80
142	142	-	152	154	-
75	70	75	80	72	130
100	95	-	123	130	-
65	55	-	65	60	140
90	-	125	125	125	125
-	100	110	-	80	-
-	-	-	9x10exp(-5)	7x10exp(-5)	-
-	-	-	-	-	-
>600	>600	600	>600	>600	>600
-	-	-	-	-	-
V2	V2	V0	V2	V0	V0
0,8	0,8	1,6	1,6	1,6	1,6
960	960	960	960	960	960
1,6	1,6	1,6	1,6	1,6	1,6
-	-	775	-	750	775
-	-	1,6	-	1,6	1,6
26	26	-	26	28	-

• **Flame retardant unreinforced
NILENE E V2**

Polypropylene copolymer, flame retardant UL94 V2.
Available: all colours, UV stabilized (L), heat stabilized (S), laser printable (YT), detergent stabilized (D).

• **Flame retardant reinforced
NILENE E V2 LBAF**

Polypropylene copolymer, low bromine type flame retardant UL94 V2.
Available: all colours, UV stabilized (L), heat stabilized (S), laser printable (YT), detergent stabilized (D).

• **Flame retardant mineral filled
NILENE E K20T V0 WOD**

Polypropylene copolymer, 20% talcum filled, flame retardant UL94 V0, designed according to RoHS Decree.
Available: all colours, UV stabilized (L), heat stabilized (S), laser printable (YT), detergent stabilized (D).

• **Flame retardant reinforced
NILENE E K10T V2**

Polypropylene copolymer, 10% talcum filled, flame retardant UL94 V2, designed according to RoHS Decree.
Available: all colours, UV stabilized (L), heat stabilized (S), no blooming (NB).

• **Halogen free flame retardant unreinforced
NILENE E V0 LSZH**

Polypropylene copolymer, halogen free flame retardant UL94 V0, heat stabilized, designed according to RoHS Decree.
Available: all colours, UV stabilized (L).

• **Flame retardant reinforced
NILENE P K30VA V0**

Polypropylene homopolymer 30% glass fibres reinforced chemically coupled, flame retardant UL94 V0, very good mechanical properties.
Available: all colours, UV stabilized (L), heat stabilized (S), laser printable (YT), detergent stabilized (D).

PP Nilflex

• Unreinforced Nilflex 1	• Mineral filled Nilflex 10 K15TE	Nilflex 10 K10T
0,8	5	10
230°C - 2,16 kg	230°C - 2,16 kg	230°C - 2,16 kg
-	15	10
0,89	1,00	0,96
0,05	0,05	0,05
-	-	-
1,5	1,0-1,3	1,1-1,3
1,5	1,0-1,3	1,1-1,3
>500	200	200
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
>100	>70	>100
-	-	-
-	22	25
400	1600	1350
-	-	-
-	-	152
-	70	60
50	-	-
-	56	52
-	-	-
-	-	-
-	6x10exp(-5)	6x10exp(-5)
-	-	-
>600	>600	>600
-	-	-
-	HB	HB
-	1,6	1,6
-	-	-
-	-	-
-	-	-
-	-	-
-	20	-

• Unreinforced

NILFLEX 1

Polypropylene copolymer high impact grade.

Available: all colours, UV stabilized (L), heat stabilized (S), metal stabilized (MT).

• Mineral filled

NILFLEX 10 K15TE

Polypropylene copolymer high impact grade, 15% mineral filled, designed for aesthetical applications.

Available: all colours, UV stabilized (L), heat stabilized (S), laser printable (LP).

NILFLEX 10 K10T

Polypropylene copolymer high impact grade, 10% mineral filled.

Available: all colours, UV stabilized (L), heat stabilized (S), laser printable (LP), antistatic (AT).



THE INTERNATIONAL CERTIFICATION NETWORK

CERTIFICATE

IQNet and its partner
CISQ/SP S.r.l.
heretby certify that the organization

TARO PLAST SPA
Via Strada Diolo, 57/A - 43019 Soragna (PR)
Via Remo Manganelli, 14 - 43010 Pieveottoville di Zibello (PR)

for the following field of activities
Granulated engineering thermoplastics: design, production, trading and technical service.

has implemented and maintains a
Quality Management System
which fulfills the requirements of the following standard
ISO 9001:2008

First issue: 19970601

Current issue: 20091019

Registration Number: **IT-3404**
Validity: 2012/10/18



Reto Blaser
Reto Blaser
President of IQNET



Giuseppe Prati
Giuseppe Prati
President of CISQ

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*The list of IQNet partners is valid at the time of issue of this certificate. Updated information is available under www.iqnet-certification.com



CERTIFICAZIONE
CERTIFICAZIONE **214**

Si certifica che il Sistema di Gestione per la Qualità di
TARO PLAST SPA
è conforme alla norma
UNI EN ISO 9001:2008

per le seguenti attività
EA14

Progettazione, produzione e commercializzazione di tecnopolimeri
granulati. Assistenza tecnica nei relativi impieghi
Granulated engineering thermoplastics: design, production, trading and technical
service.

Prima emissione
First issue
01/06/2007

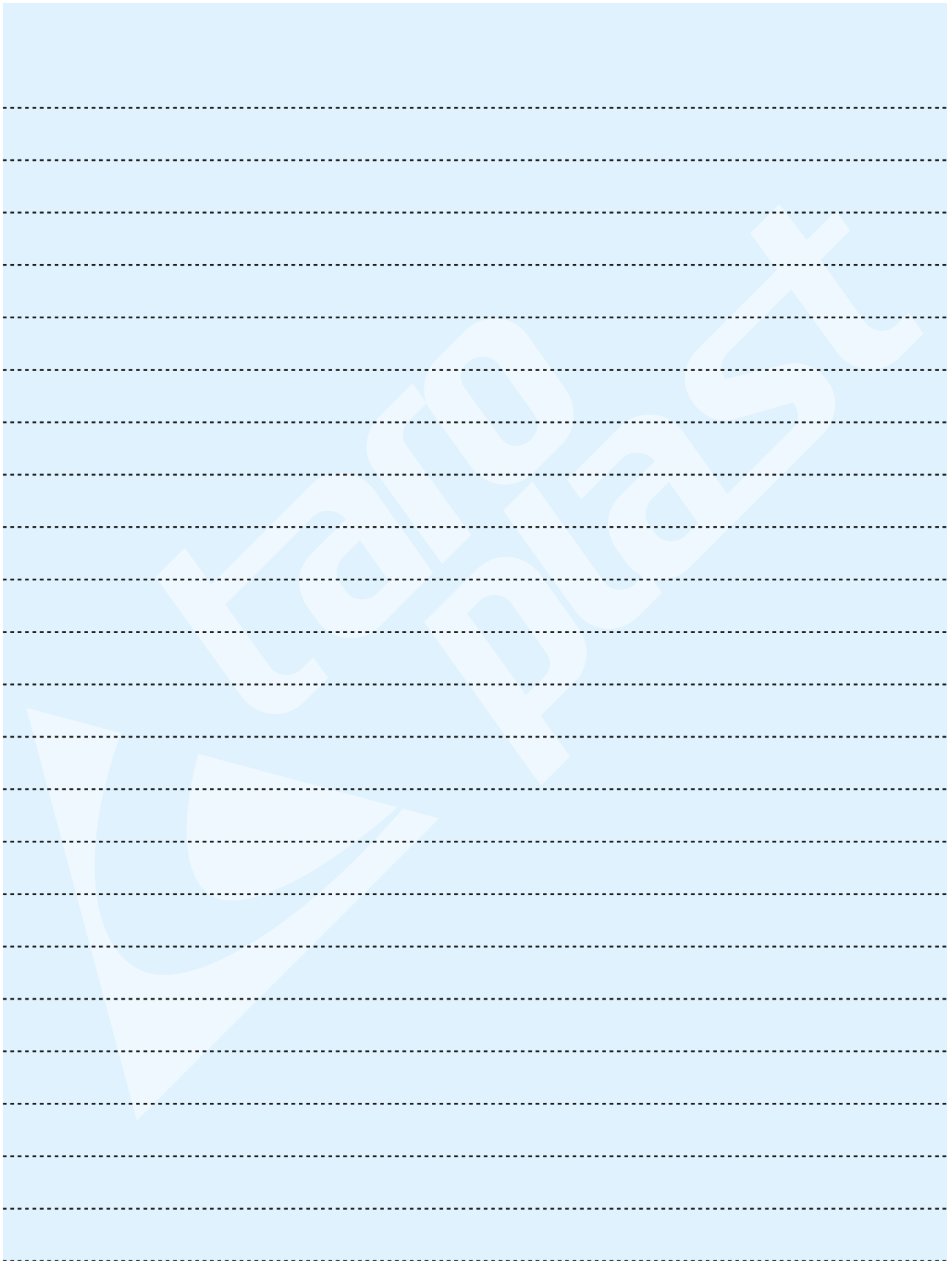
Emissione corrente
Current issue
19/10/2009

Scadenza
Expiry date
18/10/2012

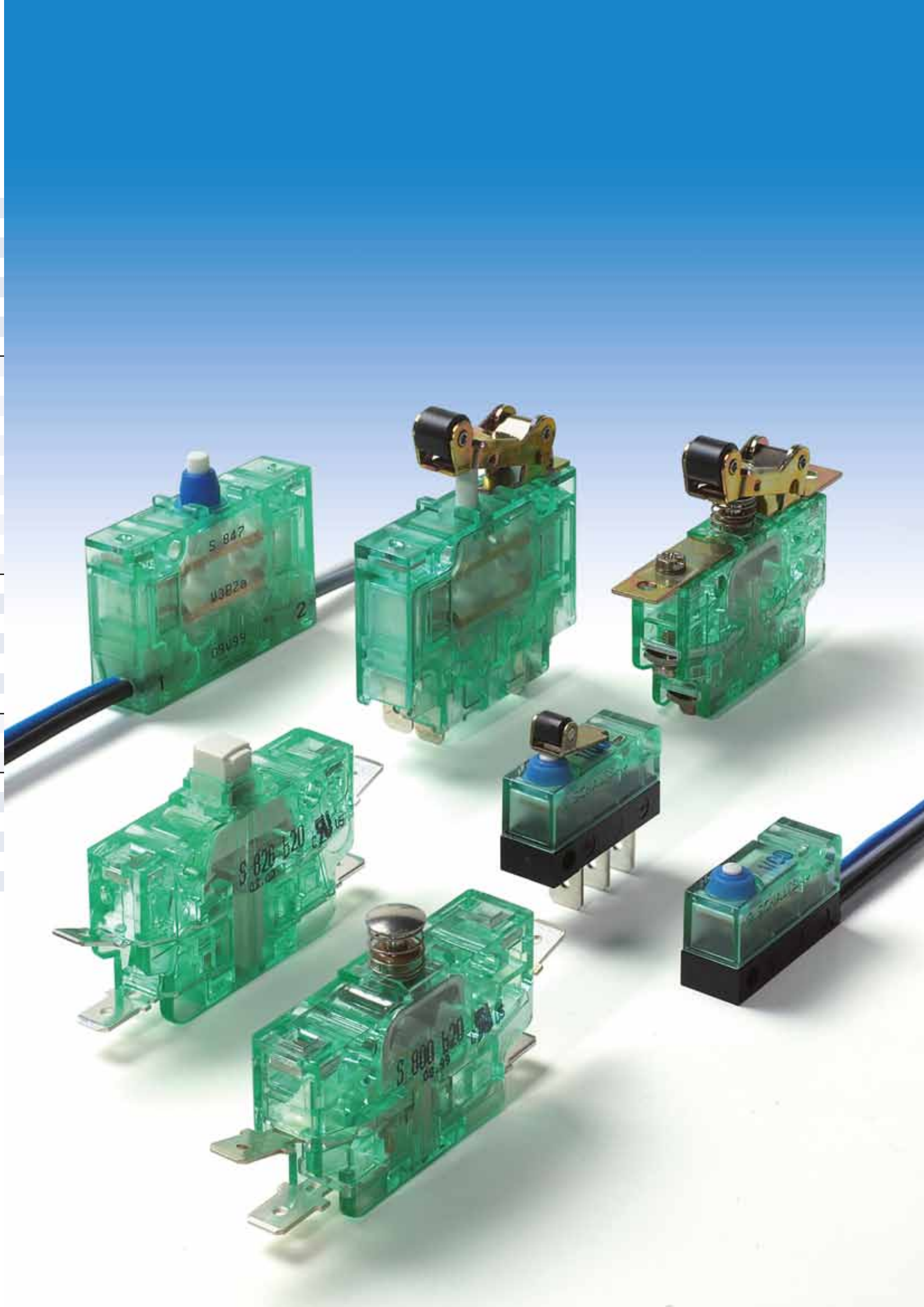
Il Presidente
Il Presidente
G. Prati

SP SRL - Via Pinello, 5 - 20144 CALABRE (BO)
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A large light blue rectangular area with horizontal dashed lines, serving as a writing space. A faint watermark is visible across the center.





IEC/EN 60269 - IEC/EN 60947-3
690V~ 125A 9.5W AC218
Torque rating: 3.5 - 4 Nm
Wire range: 1.5mm² - 50mm² solid
1.5mm² - 35mm² stranded

UL & CSA Ratings:
RATED: 600V 100A
Torque rating: 31 - 35 lb-in
Wire range: #1-14 AWG solid
#2-14 AWG stranded



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Made in Spain

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125A
485301 **690V~**

READ MANUAL
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WIRE ONLY
WIRE RANGE
1.5-50mm²

1.7mm
10-15
WIRE ONLY
WIRE RANGE
1.5-50mm²

TECHNICAL
MANUAL

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