poliLUX
POLYCARBONATE COMPOUNDS

duroLUX
POLYCARBONATE/ABS BLEND

novoLUX
ABS COMPOUNDS

POLYCARBONATE, ABS & PC/ABS COMPOUND RANGE

poliLUX
POLYCARBONATE COMPOUNDS

POLILUX 500 SERIES

Polilux 500 is the first range in the Polilux Polycarbonate Group. Manufactured from virgin raw materials this gives excellent product characteristics in transparent, opaque and opalescent grades. The quality is second to none and allows the manufacturer to give assurances that the product will be free from blemishes or specks but still with a high degree of transparency.

The Melt Flow Index is determined by our own hardness scale and the IZOD is greater than 550 J/m in transparent and opaque products and approx 100 J/m for opalescent colours.
Due to a high level of internal quality control, product claims are extremely rare. However they will be accepted if the Melt Flow Index is out of the standard range, the IZOD is lower than indicated or the colourmetric table has a variation from the colourmetric data of approx. +/- 0.7.

POLILUX 400 SERIES

Polilux 400 is the second range in the Polilux Polycarbonate Group. Manufactured from top quality raw materials this gives good product characteristics enabling us to offer a wide range of transparent, opaque and opalescent grades. The transparent grade has excellent surface characteristics and the Polilux 400 range offers light opalescent products.

It is not possible to produce products which are required to come into contact with food and drugs and the FR (Flame Retardant) range is available V0 rated but not certified. A 'Yellow Card' is only available in the 500 Series.

The Melt Flow Index is determined by our own hardness scale and the IZOD is greater than 350 J/m in transparent and opaque products and approx 100 J/m for opalescent colours.

Due to a high level of internal quality control product claims are extremely rare. However they will be accepted if the Melt Flow Index is out of the standard range, the IZOD is lower than indicated or the colourmetric table has a variation from the colourmetric data of approx. +/- 1.

POLILUX 300 SERIES

Polilux 300 is the third range in the Polilux Polycarbonate Group. Manufactured from high quality re-engineered products it enables us to offer an extensive range of opaque products only.

The Melt Flow Index is determined by our own hardness scale and the IZOD is greater than 200 J/m for all types.

It is not possible to produce Polilux 300 with a V0 rating as the maximum flammability rating for this Series is V1.
Due to a high level of internal quality control product claims are extremely rare. However they will be accepted if the Melt Flow Index is out of the standard range, the IZOD is lower than indicated or the colourmetric table has a variation from the colourmetric data of approx. +/- 1.

For all three Series it is possible to produce a special Glass Reinforced product with up to 30% glass fibre.

For other possible additives and special formulations for all grades please refer to the individual specification sheets and consult with our technical department.

PROPERTIES	Unit	ASTM	DIN	ISO	NR	FG	FR	WR
Physical								
Density	gr/cm3	D792	53479	R1183	1.20	1.25	1.20	1.20
Mould Shrinkage	%	D955	16901		0.5/0.7	0.2/0.5	0.5/0.7	0.5/0.7
Melt Flow Index	gr/10	D1238	53735	1133				
Thermal								
Softening Point Vicat B/50	°C	D1525	53460	R306	150	155	140	148
Distortion Temperature 1.81 Mpa	°C	D648	53461	R75	140	143	132	138
Mechanical								
Tensile strength								
Yield load	Mpa	D638	53455	R527	60	65	60	60
Breaking load	Mpa	D638	53455	R527	70	65	60	70
Elongation @Yield	%	D638	53455	R527	7	5	6	7
Elongation @Break	%	D638	53455	R527	120	15	100	120
Flexural Modulus	Mpa	D790	53452	R178	2400	3700	2400	2400
Rockwell Hardness	ScalaM	D785		2039	80	85	80	80
Izod notched impact strength	J/M	D256		R180	700	240	650	700
Flammability								
Self Extinguishing UL 94 3.2mm/1.6mm					V2	V1	V0	V2
Incandescent Wire 2mm	°C			IEC 695.2.1	750	850	960	750

Polilux drying times are approx. 5-6hrs

	Drying Time °C	Cylinder Temp °C	Mould Temp °C
Polilux NR	120-130	250-280	90-110
Polilux FG	120-130	250-290	100-120
Polilux FR	120-130	240-270	90-110
Polilux WR	120-130	250-280	90-110

Polilux 'NR' - Low-medium-high viscosity for moulding and extrusion and general purpose.

NR 'x'	MFI greater than 22
NR 'z'	MFI 16-21
NR 'v'	MFI 11-15
Nr 'u'	MFI 6-10
NR 't'	MFI less than 6

Polilux 'FG' - Glass reinforced by 10% - 20% - 30% with excellent thermal properties and high rigidity.

Polilux 'FR' - Self extinguishing with flame retardant class V0 classification.

Polilux 'WR' - Water resistant.

UV stabilised versions available in all grades.

duroLUX

POLYCARBONATE/ABS BLEND COMPOUNDS

Durolux polycarbonate / ABS blend compounds are available in a large range of formulations to meet the individual customer requirements. They range from a general all purpose material with a Melt Flow Index of 2.5 to 18.

Durolux is also available as a High Gloss injection moulding grade, Flame Retardant V0 classification grade and a glass filled reinforced range.

PROPERTIES	Unit	ASTM	DIN	ISO	NR 'J'	NR 'Y'	NR 'K'	HG	FR	FG
Physical										
Density	gr/cm3	D792	53479	R1183	1.12	1.15	1.16	1.12	1.19	1.25
Mould Shrinkage	%	D955	16901		0.4/0.7	0.4/0.7	0.4/0.7	0.4/0.7	0.4/0.6	0.2/0.3
Melt Flow Index	gr/10	D1238	53735	1133	12	12	12	18	15	2.5
Thermal										
Softening Point Vicat B/50	°C	D1525	53460	R306	110	120	130	110	105	132
Distortion Temperature 1.81 Mpa	°C	D648	53461	R75	100	105	110	100	105	115
Mechanical										
Tensile strength										
Yield load	Mpa	D638	53455	R527	48	52	57	48	55	80
Breaking load	Mpa	D638	53455	R527	42	47	52	42	50	80
Elongation @Yield	%	D638	53455	R527	4	4	4.5	4	4	2.5
Elongation @Break	%	D638	53455	R527	45	50	55	45	50	2.5
Flexural Modulus	Mpa	D790	53452	R178	2300	2300	2400	2300	2400	5500
Rockwell Hardness	ScalaM	D785		2039	72	74	76	72	80	80
Izod notched impact strength	J/M	D256		R180	450	500	500	450	500	120
Flammability										
Self Extinguishing UL 94 3.2mm/1.6mm					HB	HB	HB	HB	VO	HB
Incandescent Wire 2mm	°C			IEC 695.2.1	650	750	750	650	960	750

Durolux drying times approx 3-5hrs

	Drying Time °C	Cylinder Temp °C	Mould Temp °C
Durolux NR	90-100	220-250	60-80
Durolux HG	90-100	220-250	60-80
Durolux FR	80-90	220-240	60-80
Durolux FG	110-120	250-270	90-110

Durolux 'NR' - Low-Medium-High viscosity for moulding and extrusion and general purpose.

Durolux 'NR' - General purpose thermoplastic.

NR 'J'	Vicat B/50 = 110 °C
NR 'I'	Vicat B/50 = 115 °C
NR 'Y'	Vicat B/50 = 120 °C
NR 'F'	Vicat B/50 = 125 °C
NR 'K'	Vicat B/50 = 130 °C

Durolux 'HG' - High gloss grade for injection moulding.

Durolux 'FR' - Self extinguishing with flame retardant V0 classification.

Durolux 'FG' - Glass reinforced at 10%-20% for differing characteristics in thermal, mechanical and rigidity properties.

UV stabilised versions available in all grades.

novoLUX

ABS COMPOUNDS

Novolux ABS compounds are available as injection moulding grades or extrusion grades in many variants. The general all purpose material has a Melt Flow Index of 10 to 40.

Novolux is also offered in High Impact and High Gloss grades.

For further applications and to benefit the designers and customers Novolux can be supplied with antistatic properties, glass filled and reinforced and in Flame Retardant V0 classification ranges.

PROPERTIES	UNIT	ASTM	DIN	ISO	NR	AT	HG	HT	FR	FG
Physical										
Density	gr/cm3	D792	53479	R1183	1.04	1.05	1.04	1.05	1.20	1.17
Mould Shrinkage	%	D955	16901		0.4/0.7	0.4/0.7	0.4/0.7	0.4/0.7	0.3/0.6	0.2/0.3
Melt Flow Index	gr/10	D1238	53735	1133	20	20	35	10	25	5
Thermal										
Softening Point Vicat B/50	°C	D1525	53460	R306	92	93	93	110	85	103
Distortion Temperature 1.81 Mpa	°C	D648	53461	R75	95	95	95	110	90	97
Mechanical										
Tensile strength										
Yield load	Mpa	D638	53455	R527	42	42	45	50	38	65
Breaking load	Mpa	D638	53455	R527	35	35	37	42	32	65
Elongation @Yield	%	D638	53455	R527	2.5	2.5	2.5	2.5	2.5	/
Elongation @Break	%	D638	53455	R527	25	25	25	20	20	4
Flexural Modulus	Mpa	D790	53452	R178	2300	2500	2500	2500	2200	4800
Rockwell Hardness	ScalaM	D785		2039	105	110	108	110	100	115
Izod notched impact strength	J/M	D256		R180	250	200	150	150	150	60
Flammability										
Self Extinguishing UL 94 3.2mm/1.6mm					HB	HB	HB	HB	VO	HB
Incandescent Wire 2mm										

Novolux drying times are approx 5-6hrs

	Drying Time °C	Cylinder Temp °C	Mould Temp °C
Novolux NR	70-80	190-220	50-80
Novolux AT	70-80	190-220	50-80
Novolux HG	70-80	190-220	50-80
Novolux HT	70-80	200-230	50-80
Novolux FR	70-80	190-210	50-80
Novolux FG	70-80	210-250	50-80

Novolux 'NR' - Low-medium-high viscosity for moulding and extrusion and general purpose.

Novolux 'AT' - Antistatic.

Novolux 'HG' - High gloss grade for injection moulding.

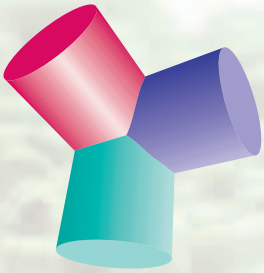
NR 'm'	MFI less than 10
NR 'n'	MFI 11-20
NR 'p'	MFI 21-30
NR 'q'	MFI 31-40

Novolux 'HT' - Good thermal and mechanical properties.

Novolux 'FR' - Self extinguishing with flame retardant V0 classification.

Novolux 'FG' - Glass reinforced at 10%-20% for differing characteristics in thermal, mechanical and rigidity properties.

UV stabilised versions available in all grades.



LA/ES spa is now able to offer an extensive range of high quality compounds in Polycarbonate, ABS and Polycarbonate/ABS blends.

LA/ES one of the largest plastic compounders in Europe has just completed an exciting move into new purpose built manufacturing facilities. This enables us to increase our volumes and along with our new testing and research laboratories means we can offer a more comprehensive service to our customers.

At **LA/ES** we can offer a full colour matching service. Our laboratory is available to produce and recommend special formulations and compounds.

The **LA/ES Products** can be divided into three main groups,

All values indicated in this brochure refer to standard products.
The exact values will range between our indicated limits.

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ABS COMPOUNDS

Available from...