



4LOY® is the registered trade name for Polycarbonate/ABS alloy compounds produced by 4PLAS.

Property	Condition	Unit	Standard	4LOY10E17100 PC/ABS Alloy based on 45% PC / 55% ABS	4LOY 10E17200 PC/ABS Alloy based on 65% PC / 35% ABS	4LOY 10E17300 PC/ABS Alloy based on 85% PC / 15% ABS	4LOY 10E17400 PC/ABS UV Stabilised Alloy based on 45% PC / 55% ABS	4LOY 10E17500 PC/ABS UV Stabilised Alloy based on 65% PC / 35% ABS	4LOY 10E17600 PC/ABS UV Stabilised Alloy based on 85% PC / 15% ABS	4LOY 10E27100 FR1 PC/ABS Alloy based on 45% PC / 55% ABS. Meets UL94 V-0 @ 1.6mm	4LOY 10E27200 FR1 PC/ABS Alloy based on 65% PC / 35% ABS. Meets UL94 V-0 @ 1.6mm	4LOY 10E27300 FR1 PC/ABS Alloy based on 85% PC / 15% ABS. Meets UL94 V-0 @ 1.6mm
Mechanical												
Izod Impact, Notched	+23°C	KJ/m2	ISO 180/1A	41	45	46	40	44	45	42	45	46
Izod Impact, Notched	-30°C	KJ/m2	ISO 180/1A	36	41	42	35	40	41	35	40	42
Tensile Modulus	+23°C	MPa	ISO 527	2100	2200	2300	2100	2200	2300	2100	2200	2300
Tensile Strain at Break	+23°C	%	ISO 527	>50	>50	>50	>50	>50	>50	>50	>50	>50
Tensile Stress at Break	+23°C	MPa	ISO 527	45	45	50	45	45	50	44	44	49
Tensile Strain at Yield	+23°C	%	ISO 527	3.7	4.2	4.7	3.8	4.1	4.5	3.6	4.1	4.6
Tensile Stress at Yield	+23°C	MPa	ISO 527	49	52	55	48	51	53	50	54	51
Thermal												
Heat Deformation Temperature	0.45 MPa	°C	ISO 75-1/2	115	122	125	112	120	123	116	126	127
Heat Deformation Temperature	1.80 MPa	°C	ISO 75-1/2	96	100	109	94	99	108	98	102	108
Vicat Softening Temperature	50N	°C	ISO 306	115	118	128	114	118	127	114	116	129
Electrical & Flammability												
Glow Wire Test	2mm Plaque	°C	IEC 60695	650	650	650	650	650	650	-	-	-
Flame Rating	1.6mm	Class	UL94	HB	HB	HB	HB	HB	HB	V-0	V-0	V-0
Flame Rating	3.2mm	Class	UL94	HB	HB	HB	HB	HB	HB	V-0	V-0	V-0
Physical												
Melt Flow Rate	230°C	g/10mins	ISO 1133	13	12	12	14	13	12	15	16	15
Specific Gravity		g/cm 3	ISO 1183	1.12	1.13	1.15	1.10	1.12	1.15	1.11	1.20	1.14
Water Absorption	Saturation, 23°C	%	ISO 62	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Mould Shrinkage	Parallel	%	ISO 2557	0.4 – 0.6	0.4 – 0.6	0.4 – 0.6	0.5 – 0.6	0.5 – 0.6	0.5 – 0.6	0.4 – 0.6	0.4 – 0.6	0.4 – 0.6

NOTE: The above given properties are based on our general experience and are given in good faith, however due to the many factors which are outside of our knowledge and control which effect the use of the products, no warranty is given, nor implied with respect of such information. This data is for reference purposes only and should not be used alone as the basis for product design or to create specification limits. It is therefore strongly recommended that users test the product under their processing conditions to determine the suitability for any required application and or use.