



4LAC[®] is the registered trade name for Acrylonitrile-Butadiene-Styrene (ABS) compounds produced by 4PLAS.

Property	Condition	Unit	Standard	4LAC 4H20000 ABS General purpose	4LAC 4H30000 ABS General purpose. Easy flow. Excellent gloss	4LAC 4H20400 ABS Standard Flow UV resistant	4LAC 4H242000 ABS Medium flow and impact modified	4LAC 4H14300 ABS Very high impact modified	4LAC 4H33100 ABS Flame retardant. Meets UL 94 V-0. Easy flow. Good gloss	4LAC 18H12115 ABS 15% Glass fibre. Excellent rigidity and good toughness	4LAC 18H12115 FR1 ABS 15% Glass fibre. Flame retardant. Meets UL 94 V-0. Good rigidity	4LAC 18H22220 ABS 20% Glass bead. Good rigidity and low warpage	4LAC 18H33100 UV ABS Flame retardant. Meets UL 94 V-0. UV resistant. Easy flow	
Mechanical														
Izod Impact, Notched	+23°C	J/m	ASTM D256	150	150	150	200	450	100	80	50	45	140	
Izod Impact, Notched	0°C	J/m	ASTM D256	-	130	130	150	200	-	50	-	25	-	
Izod Impact, Notched	-30°C	J/m	ASTM D256	-	60	60	100	130	-	30	-	-	-	
Flexural Modulus	+23°C	MPa	ISO 178	2600	2600	2600	2400	2200	2300	5500	4500	3900	2000	
Tensile Strain at Break	+23°C	%	ISO 527	19	20	19	50	>50	5	2	2	3	40	
Tensile Stress at Yield	+23°C	MPa	ISO 527	43	45	43	40	38	40	70	60	47	38	
Thermal														
Ball Pressure		°C	IEC 335	-	75	75	75	75	75	90	75	75	75	
Heat Deformation Temperature	1.80 MPa	°C	ISO 75-1/2	97	92	97	90	77	75	98	95	93	75	
Vicat Softening Temperature	50N	°C	ISO 306	108	95	108	95	93	85	102	100	97	88	
Electrical & Flammability														
Glow Wire Test	2mm Plaque	°C	IEC 60695	650	650	-	650	650	960	650	960	650	960	
Flame Rating	1.6mm	Class	UL94	HB	-	HB	-	-	V0	HB	V0	-	V0	
Flame Rating	3.2mm	Class	UL94	HB	HB	HB	HB	HB	V0	HB	V0	HB	V0	
Comparative Tracking Index		Volt	IEC 112	-	600	600	600	600	>600	550	>300	550	>600	
Physical														
Melt Flow Rate	230°C	g/10mins	ISO 1133	14	30	14	20	6	30	10	10	20	30	
Specific Gravity		g/cm ³	ISO 1183	1.04	1.05	1.04	1.05	1.05	1.18	-	-	-	-	
Water Absorption	Saturation, 23°C	%	ISO 62	-	0.10	0.1	0.10	0.10	0.15	-	-	-	-	
Mould Shrinkage	Parallel	%	ISO 2557	0.4-0.6	0.4-0.6	0.4-0.6	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.