

STEREOLITHOGRAPHY (SLA) MATERIAL RANGE. MATERIAL PROPERTIES (for comparative purposes only).



			Accura Range									
Measurement	Test Method	Unit	SL 7510		SL 7545		ClearVue Free (SL 7870)		Si25		Xtreme	
			STANDARD	+ THERMAL POST CURE	STANDARD	+ THERMAL POST CURE	STANDARD	+ THERMAL POST CURE	STANDARD	+ THERMAL POST CURE	STANDARD	+ THERMAL POST CURE
Key benefits & Notes			✓ Good stability		✓ Polypropylene simulant ✓ Excellent durability ✓ Multi-functional material		✓ ABS like rigidity ✓ Excellent water resistance ✓ Excellent optical clarity* ✓ Excellent for Quickcast™ ✓ Multi-functional material		✓ ABS like rigidity ✓ Polypropylene simulant ✓ Multi-functional material		✓ ABS like rigidity ✓ Excellent durability ✓ Multi-functional material	
Colour			Translucent amber		Translucent amber + blue tint		Clear		White		Grey	
Hardness, Shore D	ASTMD 2240		87		79	81	86		80		86	
Flexural modulus	ASTMD 790	MPa	2386		1390 - 1560	1460 - 1600	1980 - 2310		1380 - 1660		1520 - 2070	
Flexural strength	ASTMD 790	MPa	81		50 - 55	52 - 56	65 - 71		55 - 58		52 - 71	
Tensile modulus	ASTMD 638	MPa	2634		1400 - 1900	1500 - 1900	1930 - 2020		1590 - 1660		1790 - 1980	
Tensile strength	ASTMD 638	MPa	57		35 - 40	35 - 40	38-42		38		38 - 44	
Elongation at break	ASTMD 638	%	10.1		12.0 - 21.0	10.0 - 16.0	10.0 - 22.0		13 - 20		14 - 22	
Impact strength notched Izod	ASTMD 256	J/m	37.4		28.0 - 39.0	22.0 - 33.0	45 - 61		19 - 24		35 - 52	
Heat deflection temperature	ASTMD 648	@ 66 PSI	°C	58	89	48 - 50	58 - 60	48	58 - 63		62	
		@ 264 PSI	°C	49	73	43 - 48	48 - 50	56	51 - 55		54	
Glass transition, T _g	DMA, E" peak	°C	65		55	58	56		60		70 - 74	
Coefficient of thermal expansion	TMA (T<T _g)						97 x 10 ⁻⁶		107 x 10 ⁻⁶		107 x 10 ⁻⁶	
Thermal conductivity		W/m °K	0.175									
Density		g/cm ³	1.18		1.19		1.15		1.19		1.19	

*+ Resins may be withdrawn without notice. Humidity and temperature will affect material properties, therefore all figures are approximate.

* Transparent, 'optical clarity' is only achieved with hand finishing and paint application, please contact an ARRK representative for more information.

§ Intensity of 'tint' is dependent on section thickness, please contact an ARRK representative for more information.

N.B. Not all materials available across all sites

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