

# Accura® Stereolithography (SLA®) Material Selection Guide



	Material Properties/Characteristics						Key Application Areas					
	Accuracy	HiTemp	Moisture Resistance	Optical Clarity	Durability	Color	Investment Casting/ QuickCast	RTV/Master Patterns	Snap Fit Assemblies	General Purpose Models	Automotive- Under the hood	WindTunnel Testing
<b>Polypropylene-Like Class</b>												
Accura 25	●●●●		●●●		●●●●	White		●●●●	●●●●	●●●●		
Accura PP White (SL 7811)	●●●		●●●●		●●●●	White		●●●	●●●●	●●●		
<b>Tough/Durable Class</b>												
Accura Xtreme	●●●●		●●●		●●●●	Grey		●●●●	●●●●	●●●●		
Accura Xtreme White 200	●●●●				●●●●●	White		●●●	●●●●●	●●●		
<b>ABS-Like Class</b>												
Accura 55	●●●●		●●●		●●●	White		●●●	●●●	●●●●		
Accura ABS White (SL 7810)	●●●		●●●●		●●●●	White		●●●	●●●	●●●		
Accura ABS Black (SL 7820)	●●●		●●●●		●●●●	Black		●●●	●●●	●●●		
<b>Clear Class</b>												
Accura ClearVue Free (SL 7870)	●●●		●●●●	●●●●	●●●●	Clear	●●●	●●●	●●●	●●●		
Accura ClearVue	●●●		●●●●●	●●●●●	●●●●	Clear		●●●	●●●	●●●		
Accura 60	●●●●		●●●	●●●	●●●	Clear-bluish	●●●●	●●●●	●●●	●●●●●		
<b>Casting Class</b>												
Accura CastPro	●●●●		●●●●●			Clear Amber	●●●●●					
Accura CastPro Free (SL 7800)			●●●			Clear Amber	●●●●●					
<b>High Temp &amp; Composite Class</b>												
Accura 48 HTR		●●●●	●●●			Clear Amber					●●●●	
Accura SL 5530		●●●●	●●●			Clear Amber					●●●	
Accura PEAK	●●●●	●●●●	●●●●			Translucent Amber					●●●●●	●●●●
Accura CeraMAX	●●●●●	●●●●●	●●●●●			White						●●●●●
Accura Bluestone	●●●●●	●●●●●	●●●●●			Blue						●●●●●

Ranking: A five-star rating is superior—ratings are relative to other materials presented.

RATING SYSTEM





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3DSYSTEMS®

	Viscosity (@ 30° C)	Flexural Modulus (MPa) ASTM D 790	Flexural Strength (MPa) ASTM D 790	Tensile Modulus (MPa) ASTM D 638	Tensile Strength (MPa) ASTM D 638	Elongation at Break ASTM D 638	Impact Strength (J/m) ASTM D 256	Heat Defl. Temp ASTM D 648
<b>Polypropylene-Like Class</b>								
<b>Accura 25</b>	250	1380-1660	55-58	1590-1660	38	13-20%	19-24	@ 66 PSI - 58-63° C @ 264 PSI - 51-55° C
<b>Accura PP White (SL 7811)</b>	210	1960-2060	64-66	2030-2230	40-42	7-13%	42-59	@ 66 PSI - 47° C
<b>Tough/Durable Class</b>								
<b>Accura Xtreme</b>	250-300	1520-2070	52-71	1790-1980	33-44	14-22%	35-52	@ 66 PSI - 62° C @ 264 PSI - 54° C
<b>Accura Xtreme White 200</b>	650-750	2350-2550	75-79	2300-2630	45-50	7-20%	55-66	@ 66 PSI - 47° C @ 264 PSI - 42° C
<b>ABS-Like Class</b>								
<b>Accura 55</b>	155-185	2690-3240	88-110	3200-3380	63-68	5-8%	12-22	@ 66 PSI - 55-58° C @ 264 PSI - 51-53° C
<b>Accura ABS White (SL 7810)</b>	210	2040-2120	74-76	2290-2400	46-48	8-14%	24-47	@ 66 PSI - 51° C
<b>Accura ABS Black (SL 7820)</b>	210	2260-2370	75-78	1890-2440	45-47	6-13%	39-56	@ 66 PSI - 51° C
<b>Clear Class</b>								
<b>Accura ClearVue Free (SL 7870)</b>	180	1940-2250	73-76	1920-2010	38-42	10-22%	23-51	@ 66 PSI - 48° C @ 264 PSI - 41° C
<b>Accura ClearVue</b>	235-260	1980-2310	72-84	2270-2640	46-53	3-15%	40-58	@ 66 PSI - 51° C @ 264 PSI - 50° C
<b>Accura 60</b>	150-180	2700-3000	87-101	2690-3100	58-68	5-13%	15-25	@ 66 PSI - 53-55° C @ 264 PSI - 48-50° C
<b>CastPRO Class</b>								
<b>Accura CastPro</b>	240-260	2310-2340	82-84	2490-2620	52-53	4.1-8.3%	43-49.5	@ 66 PSI - 51° C @ 264 PSI - 50° C
<b>Accura CastPro Free (SL 7800)</b>	205	2200-2480	81-83	1940-2350	45-48	9-19%	35-50	@ 66 - 62° C
<b>High Temp &amp; Composite Class</b>								
<b>Accura 48 HTR</b>	200-250	2760-3400	105-118	2800-3980	64-67	4-7%	22-29	@ 66 PSI - 65° C @ 264 PSI - 57° C
<b>Accura SL 5530</b>	210-270	2620-3240	63-87	2889-3144	57-61	3.8-4.4%	21	@ 66 PSI - 70-85° C @ 264 PSI - 55-58° C
<b>Accura PEAK</b>	605	4180-4790	77-126	4220-4790	57-78	1.3-2.5%	21.3-27.3	@ 66 PSI - 78° C @ 264 PSI - 59° C
<b>Accura CeraMAX</b>	1500-2000	8270-8370	137-145	9460-9680	78-87	1.0-1.5%	14.5-17.9	@ 66 PSI - 148° C @ 264 PSI - 95° C
<b>Accura Bluestone</b>	1200-1800	8300-9800	124-154	7600-11700	66-68	1.4-2.4%	13-17	@ 66 PSI - 65-66° C @ 264 PSI - 65° C

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