

Ultracur3D® Photopolymers - Material Properties Overview

Ultracur3D®																								
UV Range (365 – 405 nm)															Daylight Range (460 nm)						SLA (355 nm)			
Tough				Rigid					Flexible and Elastomeric				Dental			Engineering Plastic Daylight					SLA			
ST 45	ST 80	ST 1400	ST 7500 G	RG 35	RG 50	RG 1100	RG 3280	RG 9400 B FR	FL 300	FL 60	EL 60	EL 150	EL 4000	DM 2505	DM 2304	DMD 1005	EDP 1006	EPD 1086	EPD 2006	EPD 3500	EPD 4006	SLA 7700		
E Modulus (MPa)	2300	1500	1900	2300	2600	2300	3080	10600	3900						2200		2710	1500	1810	2370	2500	1800	2250-2550	
Tensile Strength (MPa)	60	35	45	54	80	63	70	87	78	5	4	9	7	11	48	4	60	40	42	50	60	45	46-51	
Elongation at Break (%)	25	20	43	13	6	4	5	1.3	3	245	90	95	182	170	4	160	4	25	26	10.3	18	45	5-15	
Flexural Modulus (MPa)	2400	1700	1540	2150	2400	2100	2880	8780	3400						2150		2400	1460	1620	2210	2400	1600	2200-2450	
Flexural Strength (MPa)	110	60	80	95	110	87	119	73	115						83		85	52	67	90	110	70	85-90	
Impact Strength - Izod Notched (J/m)	30	24	43	25	23	11	16	24	20									35	28	11	25	46	25	
Hardness	80 D	80 D	78 D	82 D	85 D	85 D	85 D	96 D	88 D	40 A	60 A	75 A	80 A	90 A	73 D	50 A	80 D	79 D	81 D	80 D	79 D	78 D	80 D	
HDT - 0.45 MPa (°C)	73	46	57	64	83	66	116	>280	255						69		93	44	53	81	70	54	51	
HDT - 1.85 MPa (°C)	61	42	48	54	64	55	84	132	86						55		73	40	46	61	57	43	50	
Flammability	HB				HB		HB	HB	V-0 (1.5 mm)									HB	HB	HB		HB		
Viscosity - 30 °C (mPas)	210	400	280	130	600	65	200	230	490	160	400	3400	90	350	80	160	110	1033	450	310	600	300	330	
Tear Strength - Graves (N/mm)										9	9	18	14	37										
Rebound Resilience (%)										16	11	21	28	30										

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Temperature Resistance	★★	★	★	★★	★★	★★★	★★★	★★★						★★		★★	★	★	★★	★★	★	★
Water Resistance	★	★★★★	★★★★	★★★★	★★★★	★★	★★★★	★★★★	★★	★★	★★★★	★	★	★★	★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Chemical Resistance	★★	★★★★		★★	★★★★		★★★★	★★★★	★		★★	★★	★★					★★★★	★★★★	★★	★★	★★★★
UV Resistance	★★	★★★★	★★	★★	★★		★★		★	★★★★		★★	★★★★					★★	★★	★★	★★	★★
Accuracy														●	●	●						
Rosflex									●		●	●										
Flammability	●				●		●	●										●	●	●		●
Biocompatibility	●	●	●	●	●		●		●		●	●	●				●		●		●	
Sterilization	●	●	●		●		●			●	●											
General Purpose	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓
Industrial Use / Tooling	✓		✓	✓	✓		✓	✓			✓	✓	✓						✓	✓	✓	
Dental														✓	✓	✓						
Medical Modelling			✓		✓				✓		✓	✓	✓									
Color	● ●	● ●	●	●	● ●	●	● ●	●	●	●	●	●	● ●	●	●	●	●	●	●	●	●	●

● Data available, please contact us.