

PHOTOPOLYMERS



These materials have great versatility, they can reach temperatures up to $>40\text{ C}^{\circ}$, in them, we can find diverse characteristics whether you are looking for a tough, rigid, resistant, flexible, dental, or engineering plastic; these materials can be found in black, clear transparent or ceramic color, also they can paint them according to your requirements. The following materials are compatible with DLP technology.

	UV RANGE (344 – 405 NM)												DAYLIGHT RANGE (460 NM)						
	TOUGH			RIGID			FLEXIBLE AND ELASTOMERIC					DENTAL			ENGINEERING PLASTIC DAYLIGHT				
	ST 45	ST 80	ST 1400	RG 35	RG 50	RG 1100	FL 300	FL 60	EL 60	EL 150	EL 4000	DM 2505	DM 2304	DMD 1005	EDP 1006	EDP 1086	EDP 2006	EDP 3500	EDP 4006
E Modulus (MPa)	2300	1500	1900	2600	2300	3080	-	-	-	16	42	2200	-	2710	1500	1810	2370	2500	1800
Tensile Strength (MPa)	60	35	45	80	63	70	5	4	9	7	11	48	4	60	40	42	50	60	45
Elongation at Break (%)	25	20	43	6	4	5	245	90	95	182	172	4	160	4	25	26	10	18	45
Flexural Modulus (MPa)	2400	1700	1540	2400	2100	2880	-	-	-	-	-	2150	-	2400	1460	1620	2210	2400	1600
Flexural Strength (MPa)	110	60	80	110	87	119	-	-	-	-	-	83	-	85	52	67	90	110	70
Impact Strength - Izod Notched (J/m)	30	24	43	23	11	16	-	-	-	-	-	-	-	-	35	28	11	25	46
Hardness	80 D	80 D	78 D	85 D	85 D	85 D	40A	60 A	75 A	77 A	90 A	73 D	50 A	80 D	79 D	81 D	80 D	79 D	78 D
HDT - 0.45 MPa (°C)	73	46	57	83	66	116	-	-	-	-	-	69	-	93	44	53	81	70	54
HDT - 0.45MPa (°C)	61	42	48.7	64	55	84	-	-	-	-	-	55	-	73	40	46	61	57	43
Flammability	HB	-	-	HB	-	HB	-	-	-	-	-	-	-	-	HB	HB	HB	-	HB
VISCOSITY - 30 °C (mPas)	210	400	280	600	65	201	160	400	3400	90	350	80	160	110	1033	450	310	600	300
Tear Strength - Gaves (N/mm)	-	-	-	-	-	-	9	9	18	14	37	-	-	-	-	-	-	-	-
Rebound Resilience (%)	-	-	-	-	-	-	16	11	21	28	30	-	-	-	-	-	-	-	-

APPLICATIONS

Commercial product testing
Functional assembly
Public surveys
Jewelry, art and decoration parts

Field testing
Visual evaluation
Aesthetic evaluation