

RenPIM® Parts In Minutes® Rapid Prototyping Polyurethanes Specifications

Product	Mix Ratio Resin to Hrd'nr by vol.	Gel Time (seconds)	Demold Time (min.)	Viscosity Resin - Hrd'nr (cps.)	Density (g/cc)	Ultimate Compressive Strength (psi)	Hardness (Shore D)	Ultimate Flexural Strength (psi)	Ultimate Tensile Strength (psi)	Flexural Modulus (psi)	Deflection Temp.* (264 psi) (°F)	Izod Impact (ft.lb./in.)	Tg per DMA (°F)	Cured Colors
RenPIM 6450	67:100	45-65	15-30	170-1,600	1.14	23,100	77	7,000	4,900	184,000	208	0.9	306	Buff
RenPIM 6451	67:100	65-85	20-45	170-1,600	1.15	17,900	76	6,900	4,200	174,000	212	0.6	302	Buff
RenPIM 6452	67:100	50-70	15-30	30-1,600	1.15	22,300	79	7,900	4,300	198,000	162	0.8	252	Off-white
RenPIM 6453-1	65:100	50-70	15-30	200-2,000	1.23	20,200	81	7,300	4,600	240,000	174	0.5	275	Buff
RenPIM 6454	67:100	45-65	15-30	75-1,700	1.20	27,100	85	11,700	3,900	307,000	162	0.4	228	Caramel
RenPIM 6455	67:100	100-130	45-90	170-1,800	1.20	32,400	83	10,000	6,100	279,000	148	0.7	237	Caramel
RenPIM 6456	50:100	45-65	15-30	170-1,600	1.14	8700	72	5,700	3,800	143,000	190	0.5	270	Buff
RenPIM 6457	50:100	90-120	60-120	170-750	1.15	9,500	65	2,800	2,700	78,000	123	0.8	175	Buff
RenPIM 6458	100:100	35-60	15-30	75-400	1.21	14,100	86	16,500	10,200	432,000	129	0.9	190	Clear Amber
RenPIM 6459	95:100	180-240	120	1,200-1,200	1.10	30,600	79	6,600	5,500	154,000	144	1.3	194	Clear
RenPIM 6460	67:100	45-65	15-30	170-1,500	1.17	24,500	80	7,100	5,400	181,000	232	1.1	320	Buff
RenPIM 6461	100:100	45	60	30-2,150	1.18	32,000	81	11,700	7,800	246,000	286	0.7	305	Black
RenPIM 6462	75:100	40-50	5	550-1,400	-	-	74	4,900	4,500	120,000	194 (66 psi)	2.3	194	Black
RenPIM 6481	50:100	60-90	60	150-2,350	1.20	-	62A	-	1,100	-	-	-	-	Off-White
RenPIM 6486 Fast	100:50	90-150	60	7,800-100	1.15	-	66	4,500	4,500	101,000	147	5.4	229	Amber
RenPIM 6489	100:50	30-40	10-30	1,700-1,900	-	-	75	7,800	-	190,000	185 (66 psi)	2	-	Off-White
RenPIM 6490	100:50	70-80	30-40	1,700-1250	1.14	25,500	78	6,800	4,700	166,000	143 (66psi)	1.7	160	Off-White
ASTM test				D2393	D792	D695	D2240	D790	D638	D790	D648	D256	D4065	

*Deflection Temperature is the temperature when a 1/2 x 1/2 x 5 bar (supported at both ends) deflects 0.010 of an inch under a 264 psi fiber stress. The maximum service temperature may be far above this value depending on the application and the stress of the plastic at high temperature.