



ADVANCED PROTOTYPING INC.

URETHANE SPECIFICATIONS

Material Name	Hardness, ASTM D-2240, Shore D	Flexural Modulus, ASTM D-790, psi	Flexural Modulus, Thermoplastic Comparison	Ultimate Flexural Strength (5% Strain) ASTM D-790,psi	Izod Impact, ASTM D-256, ft.lb./ in.	Tg per DMA, ASTM D-4065 °F	Deflection Temperature, ASTM D-648, 66psi, °F, 264psi, °F	Ultimate Tensile Strength, ASTM D-638, psi	Elongation, ASTM D-638, %	Ultimate Compressive Strength, ASTM D-695, psi	Tear Strength, ASTM D-624, ppi
RP 6450 55-second PUR	77	184,000	HDPE, U-PP, HI-ABS	7,000	0.88	306	252 208	4,900	11.7	23,100	---
RP 6451 75-second PUR	76	181,000	HDPE, U-PP, HI-ABS	6,900	0.64	302	259 212	5,200	7.7	17,900	---
RP 6452 High Impact PUR	79	201,000	HPDE, U-PP, HI-ABS	7,900	1.35	252	181 162	5,200	12.5	22,300	---
RP 6453 Flame Retardant PUR	81	194,000	HPDE, U-PP, HI-ABS	7,300	0.70	275	208 174	4,800	7.2	20,200	---
RP 6454 High Flexural Modulus PUR	85	313,000	HR-ABS, MI-ABS, HI-ABS, FR-ABS	11,700	0.70	228	186 162	7,500	12.2	27,100	---
RP 6455 2-minute PUR	83	262,000	HI-ABS	10,000	0.77	23	183 148	6,400	15.0	32,400	---

RP 6456 Shore 72D PUR	72	148,000	HPDE	5,700	0.66	270	210 190	3,500	5.9	8,700	---
RP 6457 Shore 65D PUR	65	78,000	MPDE, LPDE	2,800	0.80	175	145 123	2,700	8.1	9,500	---
RP 6458 Very High Flexural Modulus PUR	86	432,000	FR-ABS	16,500	0.87	190	136 129	10,200	3.2	14,100	---
RP 6459 Shore 80D Clear PUR	79	168,000	HPDE	6,600	1.30	194	176 144	5,400	26.2	30,600	---
RP 6460 High Heat PUR	80	174,000	HPDE, U-PP	7,100	1.02	320	275 232	5,300	8.0	24,500	---
RP 6461 300°F Rigid PUR	81	246,000	U-PP, HI-ABS	11,650	0.70	339	309 286	7,800	9.6	32,000	---
RP 6473 SI Clear Silicone PUR	30 (Shore A)	---	---	---	---	---	---	575	300	---	55-60
RP 6480 Rigid 13-20lb(lb./cu. ft.) Foam PUR	89-91	32,000	---	968	0.23	187	138 124	---	---	644	---
RP 6481 Shore 60-65A PUR	60-65 (Shore A)	---	---	---	---	---	---	1,100	310	---	142
RP 6482 Shore 70-75A PUR	70-75 (Shore A)	---	---	---	---	---	---	3,000	325	---	194
RP 6483 Shore 80-85A PUR	80-85 (Shore A)	---	---	---	---	---	---	3,100	325	---	323
RP 6484 Shore 90-95A PUR	90-95 (Shore A)	---	---	---	---	---	---	3,400	220	---	480