Typical Cured Properties of Parts-In-Minutes Polyurethanes"

		Hardness, ASTM D-2240, Shore D	Flexural Modulus, ASTM D-790, psi	Flexural Modulus, Thermoplastic Comparison*	Flexural Strength, 5% strain ASTM D-790, psi	Notched Izod Impact, ASTM D-256, ft. lb./in.	Deflection Temperature, ASTM D-648, °F 66 psi	264 psi	Ultimate Tensile Strength, ASTM D-638, psi	Elongation, ASTM D-638, %	Ultimate Compressive Strength, ASTM D-695, psi	Tear Strength, ASTM D-624, ppi	Density, ASTM D-792, lb./ft.^{3} (g/cm^3)
Elastomeric	RP 6473 Si R/H Clear Silicone	30 (Shore A)	—	—	—	—	—	—	600	300	—	60	63 (1.01)
	RP 6481 R/H Shore 60-65A PUR	60-65 (Shore A)	—	—	—	—	—	—	1,100	300	—	140	75 (1.20)
	RP 6482 R/H Shore 70-75A PUR	70-75 (Shore A)	—	—	—	—	—	—	3,000	325	—	190	76 (1.23)
	RP 6483 R/H Shore 80-85A PUR	80-85 (Shore A)	—	—	—	—	—	—	3,100	325	—	320	78 (1.25)
	RP 6484 R/H Shore 90-95A PUR	90-95 (Shore A)					—	—	3,400	225	—	480	78 (1.25)
Low Flexural Modulus	RP 6457 R/H Shore 65D Large Part PUR	65	78,000	MDPE, LDPE	2,800^{++}	0.8	145	123	2,700	8	9,500	—	71 (1.15)
	RP 6480 R/H Rigid PUR Foam	89-91	32,000	—	1,000	0.2	138	124	—	—	640"	—	21 (0.34)
	RP 6487 R/H Ultra High Impact, High HDT PUR	64	85,000	MDPE, LDPE	3,200^{+++}	6.4	156	—	3,800	180	—	630	68 (1.10)
Medium Flexural Modulus	RP 6450 R/H 55-Second PUR	77	184,000	HDPE, U-PP, HI-ABS	7,000^{++}	0.9	252	208	4,900	12	23,100	—	72 (1.16)
	RP 6451 R/H 75-Second PUR	76	181,000	HDPE, U-PP, HI-ABS	6,900^{++}	0.6	259	212	5,200	8	17,900	—	72 (1.16)
	RP 6452 R/H High Impact PUR	79	201,000	HDPE, U-PP, HI-ABS	7,900^{++}	1.4	181	162	5,200	13	22,300	—	72 (1.16)
	RP 6453-1 R/H Flame Retardant*** PUR	70	240,000	HDPE, U-PP, HI-ABS	7,600^{+++}	0.5	158	186	4,600	6	11,000	—	77 (1.24)
	RP 6456 R/H Shore 70D PUR	70	148,000	HDPE	5,700^{++}	0.7	210	190	3,500	6	8,700	—	71 (1.15)
	RP 6459 R/H Shore 80D Clear PUR	79	168,000	HDPE	6,600^{+++}	1.3	176	144	5,400	26	30,700	—	69 (1.11)
	RP 6460 R/H High Heat PUR	80	174,000	HDPE, U-PP	7,100^{++}	1.0	275	232	5,300	8	24,500	—	73 (1.18)
	RP 6462 R/H Fast, High Impact, High Heat PUR	74	120,000	HDPE	4,900^{+++}	2.3	194	—	4,500	75-100	—	—	—
	RP 6463 R/H Slow, Crystal Clear PUR	79	250,000	HDPE, PP	10,500^{+++}	1.0	136	133	4,800	50	7,700^{++++}	—	68 (1.09)
	RP 6463 R/H Fast, Crystal Clear PUR	79	230,000	HDPE, PP	10,800^{+++}	1.1	152	140	5,700	40	6,800^{++++}	—	68 (1.09)
	RP 6486 R/H Slow, Ultra High Impact PUR	67	110,000	HDPE, U-PP	4,800^{+++}	6.6	156	—	3,600	180	—	720	72 (1.16)
	RP 6486 R/H Fast, Ultra High Impact PUR	66	101,000	HDPE, U-PP	4,500^{+++}	6.3	147	—	4,500	170	—	700	71 (1.15)
High Flexural Modulus	RP 6454 R/H High Flexural Modulus PUR	85	313,000	HR-ABS, MI-ABS, HI-ABS, FR-ABS	11,700^{++}	0.7	186	162	7,500	12	27,100	—	75 (1.20)
	RP 6455 R/H 2-Minute PUR	83	262,000	HI-ABS	10,000^{++}	0.8	183	148	6,400	15	32,400	—	75 (1.20)
	RP 6458 R/H Very High Flexural Modulus PUR	86	432,000	FR-ABS, PS	16,500	0.9	136	129	9,500	13	14,100	—	75 (1.21)
	RP 6461 R/H** 300°F Rigid PUR	81	246,000	U-PP, HI-ABS	11,700	0.7	309	286	7,800	10	32,000	—	73 (1.18)

* After 7 days at room temperature
** Cured for 1 hr. at 212°F+1hr. at 248°F+2 hrs. at 284°F
*** UL 94 V-O @ 0.125 inches

$^{++}$ Sample did not break
$^{+++}$ At yield
$^{++++}$ 0.2% offset

$^{+}$ Similar to

HDPE = High density polyethylene
MDPE = Medium density polyethylene
LDPE = Low density polyethylene

PP = Polypropylene
U-PP = Unfilled polypropylene
HR-ABS = Heat resistant ABS

MI-ABS = Medium impact ABS
HI-ABS = High impact ABS
FR-ABS = Flame retardant ABS