

Redco™ POLYPROYLENE (PP)

PROPERTY	ASTM or UL TEST	HPP*	HPP-FILLED	CPP**	CPP FILLED
SPECIFIC GRAVITY	D792	0.90-0.91	0.97-1.27	0.89-0.91	0.98-1.24
WATER ABSORPTION (%)	D570	0.01-0.03	0.01-0.09	0.03	0.01-0.02
TENSILE STRENGTH PSI (MPa)	D638	4500-6000 (31-41)	3500-16000 (24-110)	4000-5500 (28-38)	2500-10000 (17-70)
ELONGATION AT BREAK (%)	D638	100-600	1.5-80	200-500	2.2-50
TENSILE MODULUS PSI (MPa)	D638	16500-22500 (113-155)	37500-100000 (259-690)	13000-18000 (90-124)	5000-35000 (34-241)
FLEXURAL MODULUS PSI (MPa)	D790	17000-25000 (117-172)	21000-100000 (145-690)	13000-20000 (90-138)	21000-96000 (145-662)
IMPACT STRENGTH, Izod ft. lbs./in. OF NOTCH (J/m of notch)	D256	0.4-1.4 (21.6-75.6)	0.6-12 (32.4-648)	1.1-14 (59.4-756)	0.6-4 (32.4-216)
HARDNESS, ROCKWELL R	D785	80-102	75-117	65-96	81-105
THERMAL CONDUCTIVITY 10-4 cal-cm/sec-cm2- °C (10-4 BTU in/hr-ft2-°F)	C177	2.8 (0.8)	2.4-9 (0.7-2.6)	3.5-4.0 (1.0-2.6)	3-9 (0.9-2.6)
COEFFICIENT OF THERMAL EXPANSION (10-5 in/in-ºC)	D696	8-10	1.5-5	6-10	2-6
DEFLECTION TEMPERATURE °F (°C)	D648				
AT 264 psi		120-140 (49-60)	129-329 (54-165)	120-140 (49-60)	117-279 (47-137)
AT 66 psi		225-250 (107-121)	219-300 (104-149)	185-219 (85-104)	171-306 (77-152)
UL FLAMMABILITY RATING***	UL94	НВ	НВ	НВ	НВ

^{*}Homopolymer Polypropylene

^{**} Copolymer Polypropylene

^{***}V-2 ... V-1 ... V-5 ... grades available