

TYPICAL PROPERTIES OF POLYPROPYLENE (PP)

ISO or UL Test	Property	HPP*	HPP-filled	CPP**	CPP-filled
ISO1183	Specific gravity	0.90-0.91	0.97-1.27	0.89-0.91	0.98-1.24
ISO62	Water absorption (%)	0.01-0.03	0.01-0.09	0.03	0.01-0.02
ISO527	Tensile strength (MPa)	31.03-41.37	24.13-110.32	27.58-37.92	17.24-68.95
ISO527	Elongation at break (%)	100-600	1.5-80	200-500	2.2-50
ISO527	Tensile modulus (MPa)	113.7-155.1	258.5-689.5	89.6-124.1	34.4-241.3
ISO178	Flexural modulus (MPa)	117.2-172.3	144.8-689.5	89.6-137.9	144.8-661.9
ISO180	Notched izod impact strength (J/m)	21-75	32-641	59-747	32-214
ASTM D785	Hardness, Rockwell R	80-102	75-117	65-96	81-105
ISO8302	Thermal conductivity (W/(mK))	0.22	0.25-0.51	0.22	0.25-0.51
ISO11359	Coefficient of thermal expansion (10 ⁻⁴ m/m-°C)	1.4-1.8	0.27-0.90	1.08-1.80	0.36-1.08
ISO75	Deflection temperature (°C)				
	At 1.80 MPa	49-60	54-166	49-60	47-138
	At 0.45 MPa	107-121	104-149	85-104	77-152
UL 94	UL flammability rating***	HB	HB	HB	HB

*Homopolymer polypropylene **Copolymer polypropylene ***V-2 ... V-1 ... V-0 ... V-5 ... grades available.



P&A Plastics Inc.
 150 Main St. East
 Hamilton ON L8N 3W9
 (800) 263-6559
 (905) 547-1675
 www.paplastics.com