

Hyosung[®] R200P

Product Description: Topilene[®] R200P is a specially designed polypropylene random copolymer (PP-R, natural colored) that features excellent long-term hydrostatic pressure resistance and heat stability. It is suitable for hot & cold water supply pipes and fittings as well as radiator connecting pipes. It is the outcome of HYOSUNG's integrated bimodal polymerization and crystallization technology with advanced PP manufacturing process technique.

Physical Properties	Metric	English	Comments
Density	0.900 g/cc	0.0325 lb/in ³	ASTM D792
Melt Flow	0.25 g/10 min @Load 0.00000220 kg, Temperature 230 °C	0.25 g/10 min @Load 0.00000475 lb, Temperature 446 °F	ASTM D1238
Storage Temperature	40.0 °C	104 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	75	75	ASTM D785
Tensile Strength, Yield	26.5 MPa	3840 psi	ASTM D638
Flexural Modulus	0.883 GPa	128 ksi	ASTM D790
Izod Impact, Unnotched	NB	NB	ASTM D256
	0.490 J/cm @Temperature -10.0 °C	0.918 ft-lb/in @Temperature 14.0 °F	ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear	270 µm/m-°C @Temperature 0.000 - 80.0 °C	150 µin/in-°F @Temperature 32.0 - 176 °F	
Deflection Temperature at 0.46 MPa (66 psi)	90.0 °C	194 °F	ASTM D648
Vicat Softening Point	130 °C	266 °F	ASTM D1525

Processing Properties	Metric	English	Comments
Processing Temperature	20.0 - 30.0 °C	68.0 - 86.0 °F	Cooling temperature
	180 - 220 °C	356 - 428 °F	Mixing zone
Feed Temperature	160 - 180 °C	320 - 356 °F	
Die Temperature	180 - 220 °C	356 - 428 °F	
Melt Temperature	180 - 210 °C	356 - 410 °F	Melting zone
	200 - 230 °C	392 - 446 °F	
Head Temperature	180 - 220 °C	356 - 428 °F	
Drying Temperature	80.0 - 100 °C	176 - 212 °F	
Dry Time	2.00 - 4.00 hour	2.00 - 4.00 hour	