

Product Data

Developmental Data

TITANPRO SM100 FOR PPR PIPE EXTRUSION

CHARACTER SM100 is a low melt flow rate polypropylene random copolymer (PPR) resin in natural colour, classified as PPR 112 material with MRS 11.2 MPa for pipe extrusion. SM100 meets the U.S. Food and Drug Administration (FDA) regulation as specified in 21 CFR 177.1520(a)(3)(i) and (c)3.1a. TSCA Registry: CAS# 9070-79-1.

APPLICATIONS Hot & cold water supply pipes and fittings.

ADVANTAGES Excellent long-term hydrostatic pressure resistance and heat stability.
High stiffness and impact strength.
Good dimensional stability.

<u>TYPICAL RESIN PROPERTIES</u> ^(a)	<u>UNIT</u>	<u>SM100</u>	<u>TEST METHOD</u> ^(b)
Melt Flow Rate, at 230°C	g/10 min	0.25	ASTM D1238
Density	g/cm ³	0.9	ASTM D1505
<u>TYPICAL MECHANICAL PROPERTIES</u>			
Tensile Strength at Yield	kg/cm ²	280	ASTM D638
Elongation at Yield	%	16	ASTM D638
Flexural Modulus	kg/cm ²	9000	ASTM D790B
Notched Izod Impact Strength at 23°C	kg·cm/cm	No break	ASTM D256A
Heat Deflection Temperature at 4.6 kg/cm ²	°C	90	ASTM D648
Vicat Softening Point	°C	130	ASTM D1525
Rockwell Hardness	R scale	90	ASTM D785A
Minimum Required Strength (MRS) Classification	MPa	11.2	ISO 9080
Categorized Required Strength (CRS) Classification (70°C, 50 years)	MPa	3.15	ISO 9080

(a) Values shown are average and are not to be considered as specifications.

(b) ASTM and ISO methods are latest under the Society's current procedures.

Shrinkage : 1.2 – 2.0% depending on the product wall thickness and molding parameters.

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