



POLYPROPYLENE RANDOM COPOLYMER ISPLEN[®] PR-210 X6E

Producer: Repsol / Spain

Description: ISPLEN[®] PR-210 X6E is a random ethylene propylene copolymer with a high molecular weight. Due to averagely good flow properties and very high mechanical properties is a suitable grade to be processed into pipes.

Applications: Pressure pipe for hot and cold water

Highlights :

- * High thermal stability.
- * Excellent chemical resistance.
- * Excellent weldability

PROPERTY	UNIT	TEST METHOD	TYPICAL VALUE
A) GENERAL			
Melt Index			
230°C, 2.16 Kg	g/10 min	ISO 1133	0.3
230°C, 5Kg	g/10 min	ISO 1133	1.2
190°C, 5Kg	g/10 min	ISO 1133	0.6
Density	g/cm ³	ISO 1183	0.903
B) MECHANICAL			
Tensile Yield Stress	MPa	ISO 527	22
Tensile Yield Strain	%	ISO 527	10
Flexural Modulus	MPa	ISO 178	850
C) INTERNAL PRESSURE RESISTANCE			
Long-term hydrostatic strength for 50 years at 20°C	MPa	ISO TR 9080	≥ 8.0
D) OTHERS			
Izod Impact Strength 23°C (0°C), notched	KJ/m ²	ISO 180/1A	18 (3)
Rockwell Hardness (10 N)	-	ASTM D 2240	71
Vicat Softening Point (9.8 N)	°C	ISO 306	133
HDT (455 kPa)	°C	ASTM D 648	65

Colouring : ISPLEN[®] grades are supplied in natural colour but they can be easily coloured with pigments steady at processing temperatures, using dyr-colouring or masterbatch techniques.

Foodstuff Regulations : ISPLEN[®] PR-210 X6E are approved for food contact under certain legislation. For more information about specific country regulation, please, contact with our local representative or the Technical Servise.



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Processing : ISPLEN[®] PR-210 X6E can be easily processed using extruders either of the single or twin-screw type, with suitable head for produce pipes. Single screw extruders should have the following characteristics:

Length/diameter ratio: 24 to 32.

Compression ratio: 3 to 4.

Screw: with torpedo and metering section with constant pitch and flight depth.

Typical Extrusion Conditions : The following temperature profile is suggested as a guide. Conditions will depend on size and wall thickness of the pipe produced and extrusion equipment used.

4 BARREL ZONES	CROSSHEAD 3 ZONES	MELT TEMPER.
From: 190/190/195/195 °C	200/200/200 °C	205 °C
To : 200/205/210/215 °C	220/220/220 °C	225 °C