



TECHNICAL DATA SHEET

P5300

P5300 is a pipe grade HDPE, produced by the Mitsui CX Process

P5300 combines exceptional processability with high creep resistance, high ESCR and excellent mechanical properties

P5300 has MRS 11.2 MPa according to ISO 9080 and is designated PE 112 according to ISO 12162:1995

Property	Test Method	Unit	Value
Melt Flow Index (5 kg, 190°C)	ASTM D1238	g/10 min	0.25
Density (27°C)	ASTM D1505	g/cm ³	0.948
Physical Property			
Tensile Strength at Yield		MPa	26
Elongation at Yield	ASTM D638	%	11
Tensile Strength at Break	(50 mm/min)	MPa	37
Elongation at Break		%	800
Notched Izod Impact Strength (23°C)	ASTM D256A	J/m	270
Flexural Modulus	ASTM D790A	MPa	1000
Hardness	ASTM D2240	Shore D	65
ESCR (F ₅₀ , 10% Igepal soln. v/v)	ASTM D1693B	Hr	> 1000
Vicat Softening Point (10 N)	ASTM D1525	°C	125
DSC Melting Temperature	ASTM D3418	°C	131
Oxidative Induction Time	ASTM D3895	Min	> 30
Critical Pressure for Crack Propagation at 0°C	ISO 13477	Bar	≥12
Suggested Processing Conditions			
Barrel Temperature		°C	160 – 220
Die Temperature		°C	180 – 220

^{*} Halene H is the registered trademark of High Density Polyethylene of HPL Mechanical Properties are on specimens from Compression Molded sheets

Pre drying of the material at ~90°C for ~2 hours before processing is recommended.

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