

Producer: Haldia Petrochemicals LTD / India

P5300 (Halene – H*)

Technical description:

P5300 is a pipe grade HDPE, produced by the Mitsui CX Process. This resin is recommended for **PE 112** pressure pipe applications.

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

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

PROPERTIES	TEST METHOD	UNIT	VALUE
Melt Flow Index (5.0 Kg, 190°C)	ASTM D 1238	g/10 min	0.25
Density (at 27°C)	ASTM D 1505	g/cm ³	0.948
<u>Physical Property</u>			
Tensile Strength at Yield**	ASTM D 638	Mpa	25
Elongation at Yield**	ASTM D 638	%	11
Tensile Strength at Break**	ASTM D 638	Mpa	37
Elongation at Break**	ASTM D 638	%	1000
Izod Impact Strength (23°C)	ASTM D 256	J/m	270
Flexural Modulus	ASTM D 790	Mpa	1000
Hardness	ASTM D 2240	Shore D	61
E.S.C.R.	ASTM D 1693	Hr	> 1000
Vicat Softening Point (10N)	ASTM D 1525	°C	125
DSC Melting Temperature	ASTM D 3418	°C	131
Oxidation Induction Time	ASTM D 3895	min	> 30
Critical pressure for crack propagation at 0°C	ISO 13477	Bar	≥ 12
<u>Suggested Processing Conditions</u>			
Barrel Temperature		°C	160-220
Die Temperature		°C	220

* Halene H is the registered trademark of High Density Polyethylene of HPL.

** Tensile Properties are on Compression Molded Type IV Specimens as per ASTM D 638