

TECHNICAL DATA SHEET



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 | % | 8 |
| Tensile Strength at Break | (50 mm/min) | MPa | 41 |
| Elongation at Break | | % | 650 |
| 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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