HDPE PIPE EXTRUSION PE100

PE2NT11-9

TU 2243-174-00203335-2007, rev.1-4

Production method: gas-phase method of ethylene copolymerization at low pressure using complex catalysts.

Application: PE compositions are intended for the production of pipes and fittings to gas distribution networks, as well as pressure pipes and fittings to utility and drinking cold water supply systems.

No.	Parameter	Standard
1	Density, kg/m^3 at 23 °C at 20 °C	 954-960 956-962
2	Melt Flow Index at 190 °C, g/10 min.: a) at 21.6 kg b) at 5.0 kg	 5-7 min 0.1
3	MFI21,6/MFI2.16 ratio	100-170
4	MFI spread within one batch, %, maximum	±10
5	Tensile yield strength, MPa, minimum	21
6	Elongation at break, %, minimum	500
7	Carbon black weight content, %	2.0-2.5
8	Volatile weight content, mg/kg, maximum	350
9	Carbon black distribution type	I-II
10	Thermal stability at 200 °C, min., minimum	20
11	Slow propagation crack resistance at 80 °C, with initial wall stress 4.6 MPa, (on pipe samples d110 mm with SDR 11 or d160 mm with SDR 11) hrs, minimum	165 500
12	Gas component resistance at 80 °C, with initial wall stress 2 MPa, (on pipe samples d32 mm SDR 11) hrs, minimum	20
13	Resistance to rapid crack propagation at 0 °C, at maximum operating pressure exceeding 0.4 MPa	
	13.1 Small-scale method on pipe samples d110 mm with SDR 11, critical pressure pc, MPa, minimum	MOP/2.4-0.072
	13.2 Full-scale method on pipe samples d160 mm with SDR 11, critical pressure pc, MPa, minimum	MOPx1.5
14	Stability at constant internal pressure at 20 °C on pipe samples d32 mm SDR 11 with initial stress, hrs, minimum 12.4 MPa 11.6 MPa	 100 2500
15	Lower confidence bound of the stress-rupture strength, σLCL, MPa	≥10

Packing, handling and storage: in PE and PP bags assuring products preservation and maintaining their quality as per documents approved under the appropriate procedure. Transportation by combined roofed transport in accordance with rules of carriage related to this mode of transport.

PE100 HDPE Composition of PE2HT11-9 grade is a prize-winner of “100 Best Goods of Russia 2012” and “Best Goods in the Republic of Tatarstan 2012” Contests.