+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
+852-6957-5415 (HongKong)

SABIC® HDPE P5510

HIGH DENSITY POLYETHYLENE FOR PIPE EXTRUSION

DESCRIPTION

SABIC® HDPE 5510 10000 (black) is a grade, which has a high density (class MRS 8 - PE 80) and a bimodal distribution of the molecular mass. An universal grade for pipe extrusion which, due to a keen combination of properties, is particularly suitable for drinking water and waste water piping. It is also used for the manufacture of chemical apparatus and containers. This material meets (inter)national standards for use in drinking water and wastewater piping.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR) (1)			
at 190°C and 5.0kg (1)	0.43	g/10 min	ISO 1133
at 190°C and 21.6kg	10.3	g/10 min	ISO 1133
Carbon black content	2.25	%	ISO 6964
Density	956	kg/m³	ASTM D1505
MECHANICAL PROPERTIES			
Tensile modulus	850	MPa	ASTM D638
Tensile Stress at Yield (2)	22	MPa	ISO 527-1/-2
Tensile Strain at Yield (3)	8	%	ISO 527-1/-2
Charpy Impact Notched @ 23°C	24	kJ/m²	ISO 179
Charpy Impact Notched @ -30°C	8	kJ/m²	ISO 179
Hardness Shore D (4)	59	-	ISO 868
OIT 210 °C	>20	Minutes	ISO 11357-6
THERMAL PROPERTIES			
Vicat softening temperature at 50 N (VST/B)	70	°C	ISO 306
DSC test (Melting point)	123 – 127	°C	DIN 53765

(1) Compression moulding conditions of test specimen (according to ISO 293) : moulding temp: 160 °C, cooling rate: 40 °C/min
(2) Speed of testing: 50 mm/min
(3) Test specimen according to ISO 527-2 type 1BA, thickness 2 mm
(4) Conditioning of test specimen: temp. 23 °C, relative humidity 50 %, 24 hours