

Basic NOCX HDPE Pipe Material Data

NOCX HDPE pipes consist of a black inner and a colored outer surface layer. Both layers are HDPE materials based on the same polymer. Black and colored raw material data are both within the named values.

Our NOCX pipes comply to FIB bulletin Recommendation, final draft November 2003.

	Requirements		Norm	Unit	Required FIB value	NOCX Pipe value
	FIB	others				
Polymer Data						
Density	x		ISO 1183	[g/cm ³]	> 0,94	0,941 - 0,946
Melt Flow 190/5	x		ISO 1133	[g/10min]	0,35 – 1,4	0,41 – 0,55
Carbon black	x		ISO 6964	[%]	2,3 +/- 0,3	2,3
Dispersion of carbon black	x		ISO 11420	[Index]	max 3	2
Distribution of carbon black	x		ISO 11420	[Index]	max C2	C2
Anti-oxidizing Content	x			PPM	> 1000	> 1000
Mechanical Properties						
Tensile Strength at yield	x		ISO 527-2	[MPa]	> 18	21 - 22
Tensile strength at break		x	ISO 527-2	[MPa]	35	> 35
Elongation at yield stress		x	ISO 527-2	[%]	8	> 8
Elongation at break 23°C	x		ISO 527-2	[%]	> 250	> 800
Elongation at break -20°C	x		ISO 527-2	[%]	> 100	> 150
Flexural Modulus	x		ASTM D 790	[MPa]	550 - 1100	800 - 950
Ball indentation hardness		x	ISO 2039	[N/mm ²]	44 +/-4	44 +/-4
Shore hardness		x	ISO 868	[Shore A]	60	60 - 61
Impact Strength		x	ISO 179-1	[KJ/cm/cm]	18	> 20
Other Properties						
Hydrostatic Design Basis		x	ASTM D 2837	[MPa]	8,6 – 11	1,1
Thermal stability under O2	x		ISO TR 10.837	[Minutes]	> 20	> 20
ESC		x	ASTM D 1693	[hrs]	> 192	> 1500