

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 30 Recommendation.

	Test on	Norm	Unit	Required FIB value	NOCX Pipe value
Polymer Data					
Density	Raw Material	ISO 1183	[g/cm ³]	> 0,94	0,941 - 0,946
Melt Index 190/5	Raw Material	ISO 1133	[g/10min]	0,35 – 1,4	0,41 – 0,55
Carbon black	Raw Material	ISO 6964	[%]	2,3 +/- 0,3	2,3
Dispersion of carbon black	Raw Material	ISO 18553	[Index]	max 3	2
Distribution of carbon black	Raw Material	ISO 18553	[Index]	max C2	C2
Mechanical Properties					
Tensile Strength at yield	Raw Material	ISO 527-2	[MPa]	> 22	> 22
	Pipe	ISO 6259-3	[MPa]	> 18	> 20
Elongation at break 23°C	Raw Material	ISO 527-2	[%]	> 600	> 800
	Pipe	ISO 6259-3	[%]	> 350	> 500
Elongation at break -20°C	Raw Material	ISO 527-2	[%]	> 150	> 250
	Pipe	ISO 6259-3	[%]	> 100	> 150
Bending Modulus	Raw Material	ISO 178	[MPa]	> 750	900
Other Properties					
Thermal stability under O ₂	Pipe	ISO TR 10.837	[Minutes]	> 20	> 20
Thermal dilatation coeff.	Pipe	DIN 53752		-	1,7x10(-4)

Remark: FIB 30 ask conducting tensile strength and elongation at break tests acc ISO 527-2 which in fact is valid for moulded and extruded parts like sheets up to 4,0 mm wall thickness only. Today the new ISO 6259-3 issued for determination of tensile properties of polyolefin pipes is used. The test procedure is similar but the specimen shape modified for pipe wall thickness more than 4,0 mm.