

**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 ASTM D 3350 PE 345444 C / E

	Requirements		Norm	Unit	Required FIB value	NOCX Pipe value
	FIB	others				
<b>Polymer Data</b>						
Density	x		ASTM D 1505	[g/cm <sup>3</sup> ]	0,941 - 0,955	0,941 - 0,946
Melt Flow	x		ASTM D 1238	[g/10 min]	max 1,0	0,41 - 0,55
<b>Mechanical Properties</b>						
Elongation at yield stress		x	ASTM D 638	[%]	8	> 8
Elongation at break		x	ASTM D 638	[%]	> 700	> 800
Flexural Modulus	x		ASTM D 790	[MPa]	550 - 1100	800 - 950
Ball indentation hardness		x	ISO 2039	[N/mm <sup>2</sup> ]	44 +/-4	44 +/-4
Shore hardness		x	ASTM D 2240	[Shore A]	60	60 - 61
Tensile Strength at yield	x		ASTM D 638	[MPa]	21 - 24	21 - 22
Tensile strength at break		x	ASTM D 638	[MPa]	35	> 35
Impact Strength		x	ASTM D 256	[KJ/cm/cm]	18	> 20
<b>Other properies</b>						
Hydostatic Design Basis	x		ASTM D 2837	[MPa]	0,86 – 1,1	1,1
ESC	x		ASTM D 1693	[hrs]	> 192	> 1500