

Basic DHPS HDPE Half Pipe Material Data

The HDPE material for our DHP 2 HDPE Half pipes is the same weather resistant NOCX material as we use for our solid pipes.
Black and colored raw materials are based on the same polymer and so data are both within the named values.

Our DHPS Half Pipes comply to ASTM D 3350 PE 345444 C / E

	Requirements		Norm	Unit	Required FIB value	DHPS Pipe value
	FIB	others				
Polymer Data						
Density	x		ASTM D 1505	[g/cm³]	0,941 - 0,955	0,941 - 0,946
Melt Flow	x		ASTM D 1238	[g/10 min]	max 1,0	0,41 - 0,55
Mechanical Properties						
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/mm²]	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
Other properies						
Hydostatic Design Basis	x		ASTM D 2837	[MPa]	0,86 – 1,1	1,1
ESC	x		ASTM D 1693	[hrs]	> 192	> 1500