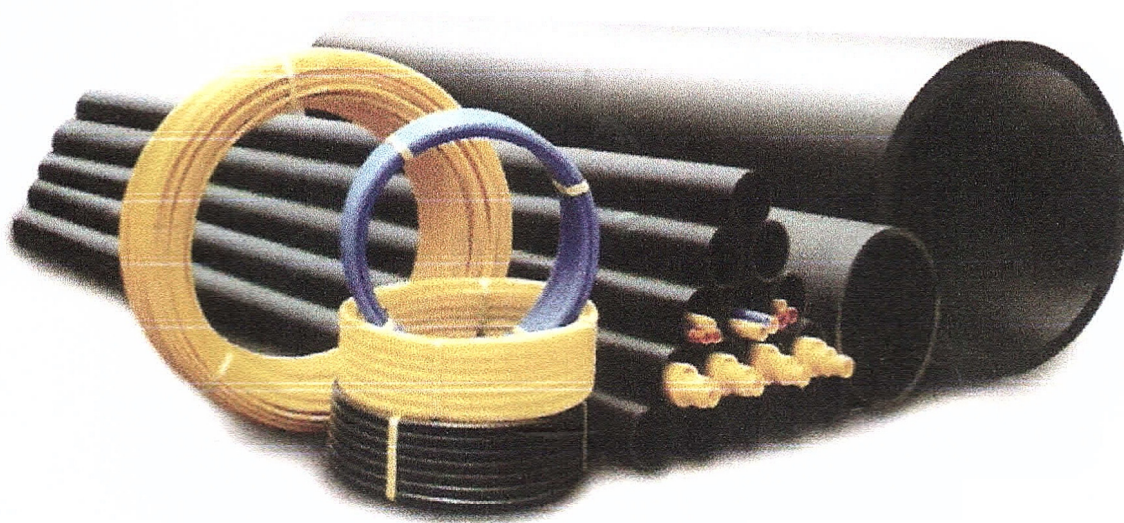


UNILON HDPE PIPE RAW MATERIAL PROPERTIES

Materials	Properties	Testing Method	Unit	PE 80	PE 100
MECHANICAL	Density	ISO 1183	g/cm ³	0.955	0.95
	Melt Index MFi 190°	ISO 1133	g/10min	0.52	0.35
	Tensile Strength at Yield Point	ISO 527	Mpa	24	28
	Elongation at Yield Point	ISO 527	%	9	9
	Direct Tensile Strength Strain Rate	ISO 527	Mpa	34	35
	Elongation at Break	ISO 527	%	> 700	> 700
	Flexural stress at 3.5% deflection (2mm/min)	ISO 178	Mpa	17	23
	Shore Hardness D	ISO 868		65	65
THERMAL	Crystalline Melting Range	(DSC)	°C	128 - 131	130 - 132
	Thermal Conductivity at 20°C	DIN 52612	W/m°C	0.4	0.4
	Coefficient of linear thermal expansion up to 80°C		1/°C	1.6 x 10 ⁻⁴	1.6 x 10 ⁻⁴
ELECTRICAL	Dielectric Strength	IEC 243	KV/cm	180	180
	Dielectric (2 x 10 ⁶ cycles)	IEC 250		2.4	2.4
	Surface Resistance	IEC 93	OHMS	> 10 ¹⁶	> 10 ¹⁶



HDPE PIPE DIMENSIONS

HDPE PIPE & FITTINGS
UNILON
SYMBOL OF HIGH QUALITY PIPE

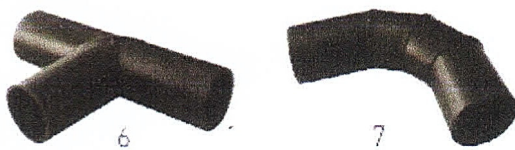
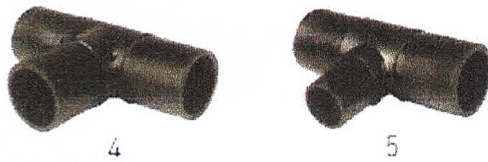
SNI-06-4829-2005: PE 80 & PE 100

Series SDR	S - 4 SDR - 9	S - 5 SDR - 11	S - 6.3 SDR - 13.6	S - 8 SDR - 17	S - 10 SDR - 21	S - 12.5 SDR - 26	S - 16 SDR - 33	S - 20 SDR - 41
PE 80	PN - 16	PN - 12.5	PN - 10	PN - 8	PN - 6.3	PN - 5	PN - 4	PN - 3.2
PE 100	PN - 20	PN - 16	PN - 12.5	PN - 10	PN - 8	PN - 6.3	PN - 5	PN - 4
OD (mm)	Wall Thickness (mm)							
16	1.8	1.6						
20	2.3	1.9	1.6					
25	2.8	2.3	1.9	1.6				
32	3.6	2.9	2.4	1.9	1.6			
40	4.5	3.7	3.0	2.4	1.9	1.6		
50	5.6	4.6	3.7	3.0	2.4	2.0	1.6	
63	7.1	5.8	4.7	3.8	3.0	2.4	2.0	1.6
75	8.4	6.8	5.5	4.5	3.6	2.9	2.3	1.9
90	10.1	8.2	6.6	5.4	4.3	3.5	2.8	2.2
110	12.3	10.0	8.1	6.6	5.3	4.3	3.4	2.7
125	14.0	11.4	9.2	7.4	6.0	4.8	3.9	3.1
140	15.7	12.7	10.3	8.3	6.7	5.4	4.3	3.5
160	17.9	14.6	11.8	9.5	7.7	6.2	4.9	4.0
180	20.1	16.4	13.3	10.7	8.6	6.9	5.5	4.4
200	22.4	18.2	14.7	11.9	9.6	7.7	6.2	4.9
225	25.1	20.5	16.6	13.4	10.8	8.6	6.9	5.5
250	27.5	22.7	18.4	14.8	11.9	9.6	7.7	6.2
280	31.3	25.4	20.6	16.6	13.4	10.7	8.5	6.9
315	35.2	28.6	23.2	18.7	15.0	12.1	9.7	7.7
355	39.6	32.2	26.1	21.1	16.9	13.6	10.9	8.7
400	44.7	36.3	29.4	23.7	19.1	15.3	12.3	9.8
450	50.2	40.9	33.1	26.7	21.5	17.2	13.8	11.0
500	55.8	45.4	36.8	29.6	23.9	19.1	15.3	12.3
560		50.8	41.2	33.2	26.7	21.4	17.2	13.7
630		57.2	46.3	37.2	30.0	24.1	19.3	15.4
710			52.2	42.1	33.9	27.2	21.8	17.4
800				47.4	38.1	30.6	24.5	19.6
900				53.5	42.9	34.4	27.6	22.0
1000				59.3	47.7	38.2	30.6	24.5
1200					57.2	45.9	36.7	29.4
1400					66.7	53.2	42.9	34.4
1600					76.2	61.3	49.0	39.3

MDPE PIPE FOR GAS - ISO 4437

OD	S - 5 SDR 11	S - 8 SDR 17	S - 8.3 SDR 17.6	OD	S - 5 SDR 11	S - 8 SDR 17	S - 8.3 SDR 17.6
(mm)	Wall Thickness (mm)			(mm)	Wall Thickness (mm)		
20	3.0			140	12.7	8.3	8.0
25	3.0			160	14.6	9.5	9.1
32	3.0	2.0	2.0	180	16.4	10.7	10.3
40	3.7	2.4	2.3	200	18.2	11.9	11.4
50	4.6	3.0	2.9	225	20.5	13.4	12.8
63	5.8	3.8	3.6	250	22.7	14.8	14.2
75	6.8	4.5	4.3	280	25.4	16.6	16.0
90	8.2	5.4	5.2	315	28.6	18.7	17.9
110	10.0	6.6	6.3	355	31.4	21.1	19.6
125	11.4	7.4	7.1				

BUTT-WELD FITTINGS



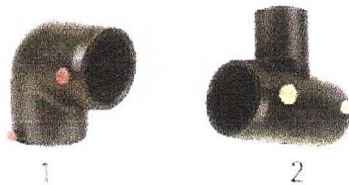
MOULDED

1. Elbow 90°
2. Stub End Flange
3. Reducer
4. Tee
5. Reducing Tee

SEGMENTED

6. Tee Segmented
7. Elbow Segmented

ELECTROFUSSION FITTINGS



1. Elbow 90°
2. Tee Connection
3. Reducer
4. Connection Socket

COMPRESSION FITTINGS



1. Male Threaded Adaptor
2. Reducing Compression
3. Elbow 90° Compression
4. Straight Coupler Compression
5. Male Threaded Elbow 90°
6. Female Threaded Adaptor