PEXMART
HDPE PIPES & FITTINGS

SABS APPROVED

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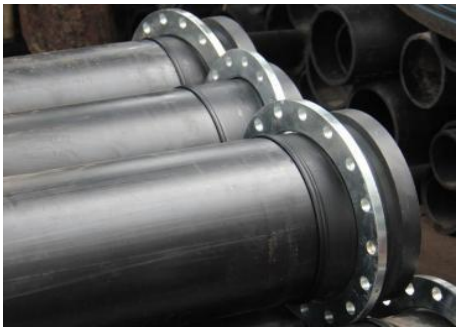

Please feel free to contact us via email: info@pexmart.com or telephonically 012 376 2347 / 012 376 0053, should you have any questions/queries or need any additional prices on quote requests.

HDPE PE100 PIPES - SABS APPROVED

SDR 7.4 - SDR 42

PN 25 - PN 4

16
20
25
32
40
50
63
75
90
110
125
140
160
180
200
225
250
280
315
355
400
450
500
560
630
710
800
900
1000
1100

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FABRICATED PIPE FITTINGS

BEND 90deg / 45deg

TEE 90deg / RED TEE

LATERAL / Y-PIECE

SEGMENTED BEND 90deg

SEGMENTED BEND 45deg

SEGMENTED BEND 30deg

STUB

CONCENTRIC REDUCER

ECENTRIC REDUCER

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FABRICATED PIPE FITTINGS

BEND 90deg / 45deg

SDR 11 - SDR9 PN 16 - PN20
25
32
40
50
63
75
90
110
125
140
160
180
200
225
250
280
315
355
400
450
500
560
630
710
800

TEE 90deg / RED TEE

SDR 11 - SDR9 PN 16 - PN20
25
32
40
50
63
75
90
110
125
140
160
180
200
225
250
280
315
355
400
450
500
560
630
710
800

LATERAL / Y-PIECE

SDR 11 - SDR9 PN 16 - PN20
25
32
40
50
63
75
90
110
125
140
160
180
200
225
250
280
315
355
400
450
500
560
630
710
800

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HDPE PIPES & FITTINGS

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FABRICATED PIPE FITTINGS

SEGMENTED BEND 90deg

SDR 11 - SDR9 PN 16 - PN20
25
32
40
50
63
75
90
110
125
140
160
180
200
225
250
280
315
355
400
450
500
560
630
710
800

SEGMENTED BEND 45deg

SDR 11 - SDR9 PN 16 - PN20
25
32
40
50
63
75
90
110
125
140
160
180
200
225
250
280
315
355
400
450
500
560
630
710
800

SEGMENTED BEND 30deg

SDR 11 - SDR9 PN 16 - PN20
25
32
40
50
63
75
90
110
125
140
160
180
200
225
250
280
315
355
400
450
500
560
630
710
800

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HDPE PIPES & FITTINGS

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FABRICATED PIPE FITTINGS

STUB

SDR 26 - 7.4 CL 6 - CL25
25
32
40
50
63
75
90
110
125
140
160
180
200
225
250
280
315
355
400
450
500
560
630
710
800
900
1000

CONCENTRIC REDUCER

SDR 26 - 7.4 CL 6 -CL25
40-32/25
50-40/32/25
63-50/40/32
75-63/50/40
90-75/63/50
110-90/75/63/50
125-110/90/75
140-125/110/90
160-140/125/110
180-160/140/125
200-180/160/140
225-200/180/160
250-225/200/180
280-250/225/200
315-280/250/225/220
355-315/280/250/225
400-355/315/280/250
450-400/355/315/280
500-450/400/355/315
560-500
630-560
710-63
800-710
900-800
1000-900

ECENTRIC REDUCER

SDR 26 - 7.4 CL 6 - CL25
25-20
32-25
40-25
40-32
50-32
50-40
63-32
63-40
63-50
75-50
75-63
90-63
90-75
110-63
110-90
125-63
125-90
125-110
140-125
160-90
160-110
160-125
160-140
180-90
180-125
180-160
200-160
200-180
225-160
225-180
225-200
250-200
250-225

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HDPE PIPES & FITTINGS

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MOULDED FITTINGS

ELBOW 90deg

ELBOW 45deg

ELBOW 30deg

TEE 90deg

REDUCING TEE

TEE 45deg

END CAP

STUB

CONCENTRIC REDUCER

PEXMART
HDPE PIPES & FITTINGS

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MOULDED FITTINGS

ELBOW 90deg

SDR 11 CL16	SDR 17 CL10
25	
32	
40	
50	
63	
75	
90	
110	
125	
140	
160	
180	
200	
225	
250	
280	
315	
355	
400	
450	
500	

ELBOW 45deg

SDR 11 CL16	SDR 17 CL10
25	
32	
40	
50	
63	
75	
90	
110	
125	
140	
160	
180	
200	
225	
250	
280	
315	
355	
400	
450	
500	

ELBOW 30deg

SDR 11 CL16	SDR 17 CL10
75	
90	
110	
125	
140	
160	
180	
200	
225	

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HDPE PIPES & FITTINGS

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MOULDED FITTINGS

TEE 90deg

SDR 11 CL16	SDR 17 CL10
25	
32	
40	
50	
63	
75	
90	
110	
125	
140	
160	
180	
200	
225	
250	
280	
315	
355	
400	
450	
500	

REDUCING TEE

SDR 11 CL16	SDR 17 CL10
63x32	
110x63	
110x90	
125x63	
125x90	
125x110	
140x63	
140x75	
140x90	
140x110	
160x63	
160x75	
160x90	
160x110	
180x75	
180x90	
180x110	
180x125	
180x140	
180x160	
200x75	
200x90	
200x110	
200x125	
200x160	
225x63	
225x75	
225x90	
225x110	
225x125	
225x140	
225x160	
315x250	
315x280	
355x250	
355x280	
355x315	
400x280	
400x315	
400x355	
450x400	
500x400	
500x450	

TEE 45deg

SDR 11 CL16	SDR 17 CL10
40	
50	
63	
75	
90	
110	
125	
140	
160	
180	
200	
225	

PEXMART
HDPE PIPES & FITTINGS

SABS APPROVED
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MOULDED FITTINGS

END CAP

SDR11 CL16	SDR17 CL10
25	
32	
40	
50	
63	
75	
90	
110	
125	
140	
160	
180	
200	
225	
250	
280	
315	
355	
400	

STUB

SDR11 CL16	SDR17 CL10
25	
32	
40	
50	
63	
75	
90	
110	
125	
140	
160	
180	
200	
225	
250	
280	
315	
355	
400	
450	
500	
560	
630	

CONCENTRIC REDUCER

SDR11 CL16	SDR17 CL10
32x25	
40x20	
40x25	
40x32	
50x25	
50x23	
50x40	
63x32	
63x40	
63x50	
75x50	
75x63	
90x50	
90x63	
90x75	
110x63	
110x75	
110x90	
125x63	
125x75	
125x90	
125x110	
140x75	
140x90	
140x110	
140x125	
160x90	
160x110	
160x125	
160x140	
180x125	
180x160	
200x125	
200x160	
225x110	
225x180	
250x160	
250x180	
250x200	
250x225	
280x180	
280x200	
280x225	
280x250	
315x225	
315x250	
315x280	
355x250	
355x280	
355x315	
400x280	
400x315	
400x355	

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HDPE PIPES & FITTINGS

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ELECTROFUSION FITTINGS

COUPLING

ELBOW 90deg

ELBOW 45deg

RED COUPLING

TEE 90deg

FEMALE ADAPTOR

MALE ADAPTOR

TAPPING TEE

PEXMART
HDPE PIPES & FITTINGS

SABS APPROVED
SABS
SAPPMA

ELECTROFUSION FITTINGS

COUPLING

SDR 11 CL16	SDR 17 CL10
20	
25	
32	
40	
50	
63	
75	
90	
110	
125	
140	
160	
180	
200	
225	
250	
280	
315	
355	
400	
450	
500	
560	
630	
710	
800	
900	
1000	

ELBOW 90deg

SDR 11 CL16	SDR 17 CL10
25	
32	
40	
50	
63	
75	
90	
110	
125	
140	
160	
180	
200	

ELBOW 45deg

SDR 11 CL16	SDR 17 CL10
32	
40	
50	
63	
75	
90	
110	
125	
140	
160	
180	
200	

PEXMART
HDPE PIPES & FITTINGS

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SABS

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ELECTROFUSION FITTINGS

RED COUPLING

SDR 11 CL16	SDR 17 CL10
25-20	
32-20	
32-25	
40-32	
50-32	
50-40	
63-32	
63-40	
63-50	
75-63	
90-50	
90-63	
110-63	
110-90	
125-63	
125-90	
125-110	
160-90	
160-110	
160-125	

TEE 90deg

SDR 11 CL16	SDR 17 CL10
25	
32	
40	
50	
63	
75	
90	
110	
125	
140	
160	
180	
200	

FEMALE ADAPTOR

SDR 11 CL16	SDR 17 CL10
20 - 1/2	
25 - 3/4	
32-1	
40 - 1 1/4	
50 - 1 1/2	
63 - 2	
75 - 2 1/2	
90 - 3	
110 - 4	

TAPPING TEE

SDR 11 CL16	SDR 17 CL10
90-32	
90-63	
110-32	
110-63	
125-32	
125-63	
160-32	
160-63	

MALE ADAPTOR

SDR 11 CL16	SDR 17 CL10
20 - 1/2	
25 - 3/4	
32 - 1	
40 - 1 1/4	
50 - 1 1/2	
63 - 2	
75 - 2 1/2	
90 - 3	
110 - 4	

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HDPE PIPES & FITTINGS

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GALVANIZED FLANGES

1000/3

25
32
40
50
63
75
90
110
125
140
160
180
200
225
250
280
315
355
400
450
500
560
630
710
800
900
1000

1600/3

25
32
40
50
63
75
90
110
125
140
160
180
200
225
250
280
315
355
400
450
500
560
630
710
800

TABLE D

25
32
40
50
63
75
90
110
125
140
160
180
200
225
250
280
315
355
400
450
500
560
630
710

PEXMART
HDPE PIPES & FITTINGS

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SABS
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COMPRESSION FITTINGS

COUPLING

REDUCING COUPLING

END CAP

MALE ADAPTOR

FEMALE ADAPTOR

FLANGED ADAPTOR

SADDLE

ELBOW 90deg

ELBOW 90deg (MALE)

ELBOW 90deg (FEMALE)

TAKLAMPS, VICLAMPS

TEE 90deg

TEE 90deg (MALE)

TEE 90deg (FEMALE)

REDUCING TEE

PEXMART
HDPE PIPES & FITTINGS

SABS APPROVED
SABS
SAPPMA

COMPRESSION FITTINGS

COUPLING

16x16
20x20
25x25
32x32
40x40
50x50
63x63
75x75
90x90
90x90

REDUCING COUPLING

20x16
25x20
32x20
32x25
40x25
40x32
50x25
50x32
50x40
63x25
63x32
63x40
63x50
75x50
75x63
90x63
90x75
110x75
110x90

END CAP

16
20
25
32
40
50
63
75
90
110

MALE ADAPTOR

16 x 3/8
16 x 3/8
16 x ¾
20 x ½
20 x ¾
20 x 1
25 x ½
25 x ¾
25 x 1
32 x ¾
32 x 1
32 x 1 ¼
32 x 1 ½
40 x 1
40 x 1 ¼
40 x 1 ½
40 x 2
50 x 1
50 x 1 ¼
50 x 1 ½
50 x 2
63 x 1 ¼
63 x 1 ½
63 x 2
63 x 2 ½
75 x 2
75 x 2 ½
75 x 3
90 x 2
90 x 2 ½
90 x 3
90 x 4
110 x 2
110 x 3
110 x 4

FEMALE ADAPTOR

16 x ½
16 x ¾
20 x ½
20 x ¾
20 x 1
25 x ½
25 x ¾
25 x 1
32 x ½
32 x ¾
32 x 1
32 x 1 ¼
40 x 1
40 x 1 ¼
40 x 1 ½
50 x 1 ¼
50 x 1 ½
50 x 2
63 x 1 ¼
63 x 1 ½
63 x 2
63 x 2 ½
75 x 2
75 x 2 ½
75 x 3
90 x 2
90 x 2 ½
90 x 3
90 x 4
110 x 3
110 x 4

FLANGED ADAPTOR

40 x 1½
50 x 1 ½
50 x 2
63 x 2
63 x 2½
75 x 2 ½
90 x 3
90 x 4
110 x 4

SADDLE

TAKLAMPS, VICLAMPS

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HDPE PIPES & FITTINGS

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COMPRESSION FITTINGS

ELBOW 90deg

16x16
20x20
25x25
32x32
40x40
50x50
63x63
75x75
90x90
110x110

TEE 90deg

16x16x16
20x20x20
25x25x25
32x32x32
40x40x40
50x50x50
63x63x63
75x75x75
90x90x90
110x110x110

ELBOW 90deg (MALE)

16 x ½
16 x ¾
20 x ½
20 x ¾
25 x ½
25 x ¾
25 x 1
32 x ½
32 x ¾
32 x 1
32 x 1 ¼
40 x 1
40 x 1 ¼
40 x 1 ½
50 x 1 ¼
50 x 1 ½
50 x 2
63 x 1 ½
63 x 2
63 x 2 ½
75 x 2 ½
75 x 3
90 x 3
90 x 4
110 x 4

ELBOW 90deg (FEMALE)

16 x ½
16 x ¾
20 x ½
20 x ¾
25 x ½
25 x ¾
25 x 1
32 x ½
32 x ¾
32 x 1
32 x 1 ¼
40 x ¾
40 x 1
40 x 1 ¼
40 x 1 ½
50 x 1 ¼
50 x 1 ½
50 x 2
63 x 1 ½
63 x 2
63 x 2 ½
75 x 2
75 x 2 ½
75 x 3
90 x 3
90 x 4
110 x 3
110 x 4

REDUCING TEE

20x16
25x20
32x20
32x25
40x25
40x32
50x25
50x32
50x40
63x25
63x32
63x40
63x50
75x50
75x63
90x63
90x75
110x75
110x90

TEE 90deg (MALE)

16 x ½ x 16
16 x ¾ x 16
20 x ½ x 20
20 x ¾ x 20
25 x ½ x 25
25 x ¾ x 25
25 x 1 x 25
32 x ½ x 32
32 x ¾ x 32
32 x 1 x 32
32 x 1 ¼ x 32
40 x 1 x 40
40 x 1 ¼ x 40
40 x 1 ½ x 40
50 x 1 ¼ x 50
50 x 1 ½ x 50
50 x 2 x 50
63 x 1 ½ x 63
63 x 2 x 63
63 x 2 ½ x 63
75 x 2 ½ x 75
75 x 3 x 75
90 x 3 x 90
90 x 4 x 90
110 x 4 x 110

TEE 90deg (FEMALE)

16 x ½ x 16
16 x ¾ x 16
20 x ½ x 20
20 x ¾ x 20
25 x ½ x 25
25 x ¾ x 25
25 x 1 x 25
32 x ¾ x 32
32 x 1 x 32
32 x 1 ¼ x 32
40 x 1 x 40
40 x 1 ¼ x 40
40 x 1 ½ x 40
50 x 1 ¼ x 50
50 x 1 ½ x 50
50 x 2 x 50
63 x 1 ¼ x 63
63 x 1 ½ x 63
63 x 2 x 63
63 x 2 ½ x 63
75 x 2 x 75
75 x 2 ½ x 75
75 x 3 x 75
90 x 2 ½ x 90
90 x 3 x 90
90 x 4 x 90
110 x 3 x 110
110 x 4 x 110

PEXMART HDPE PIPES & FITTINGS

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MANHOLES

Manufactured according engineer drawing supplied by customer

HDPE Manholes

Polyethylene is tough! It can bend and flex with various loading conditions.
This toughness means fewer potential leaks and longer life.
Lightweight polyethylene manholes are easy to install.
Smaller pieces of equipment can be used to position these manhole's.
Inlets and outlets are correctly positioned during the manufacturing process.
These inlets and outlets are factory welded into place to be leak-free

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HDPE PIPES & FITTINGS

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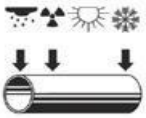
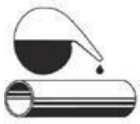
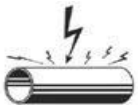
Benefits of HDPE

HDPE is a versatile thermoplastic polymer with many performance benefits. Its overall toughness, flexibility and low temperature impact resistance make it ideal for pipe systems.
HDPE has a high resistance against acids, bases and aqueous salt-solutions and below 60°C it is practically unsolvable in organic solutions. The chemical resistance of HDPE makes it perfect for standard soil and waste systems. HDPE has a good resistance against light ionized radiation without becoming radioactive itself.
The table below lists all the benefits of the HDPE properties.

	Impact-resistant and tough	Unbreakable temperatures > 5ºC
	Elastic	Suitable for underground pipes through adjustment to local ground movement
	Thermal resistant	Application possible up to 60ºC
	Smooth internal wall	Low blockage risk due to low deposit/residue effects
	Wear resistant	Lower costs due to relatively long life
	Weather resistant/UV resistant	Application in open air unrestricted through coloring with carbon black
	Chemical resistant	Suitable for transport of polluted waste water

	Poor heat conductivity	No condensation during short periods of cooling
	Recyclable	Environmentally friendly
	Insulating	Non-conductive
	Highly suitable for welding	Easy installation using butt-welding and electro fusion techniques
	Homogeneous welded joints	End load resistant and leak proof
	Prefabrication	Reduces on-site installation time
	Light in weight	Cost-saving in transport and handling

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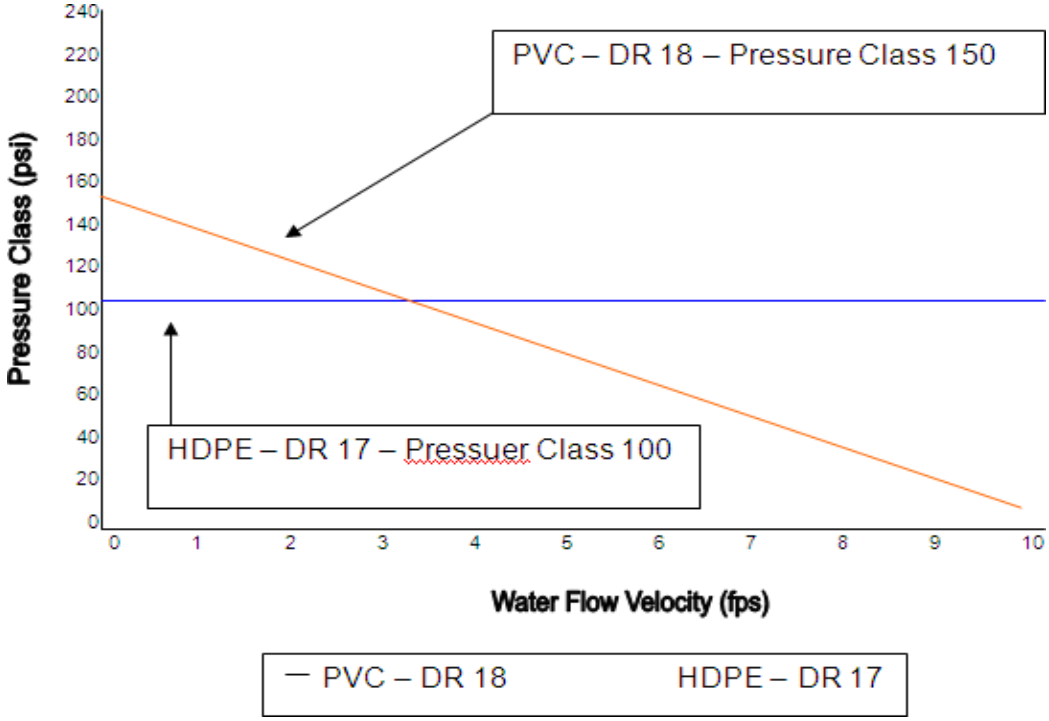
HDPE -vs- PVC

WHAT IS THE DIFFERENCE

HDPE	PVC
	

Pressure Class Comparison for HDPE and PVC Pipes as a Function of Flow Velocity of Water



When comparing differences in a material performance characteristic, such as between HDPE and PVC, it is important to make sure that you are making an accurate and equal comparison of the same characteristics exhibited in an identical situation.

The following graphs are used to show the difference found in the pressure class performance exhibited by HDPE SDR 17 and PVC DR 18 in relation to a common occurrence found in all water distribution systems; that being fluctuations (many times sudden and significant) in the flow velocity of water. In the following graphs, the ORANGE LINE will depict PVC Pressure Class 150 pipe and the BLUE LINE will depict HDPE Pressure Rated for 100-psi operations. It is important for us to note and understand from the beginning of this comparison that the term PRESSURE CLASS does not – and never has had the same performance definition for HDPE as it does for PVC. For the purpose of providing an equitable comparison we will be referring to the WORKING PRESSURE RATING of each material in an identical system scenario.

**** NOTE**

In the most general sense, the WORKING PRESSURE RATING is the maximum pressure you can put a thermoplastic pipe (amorphous and semi-crystal-line) under all normal operating conditions and expect no ruptures during its service life (I.e field pressure rating, not laboratory).

HDPE pipe is a primary alternative to PVC (polyvinyl chloride) pipe for all piping applications and rapidly gaining market share for potable water, sewer, conduit and ducting, DWV (drain, waste and vent) agriculture, and ground drainage uses. Used since the 1950's, HDPE has demonstrated its effectiveness through its durability, leak-free performance, corrosion resistance, and ductility. Its greater resilience and flexibility make performance, corrosion resistance, and ductility. Its greater resilience and flexibility make it less susceptible that PVC to surges, damage from digging and shifting soils. HDPE has a much longer service life than PVC.

HDPE is also preferable to PVC as it is chlorine-free, requires fewer additives in its manufacture, and has a much higher recycling rate then PVC. Commonly referred to as vinyl, PVC is a common plastic used in a wide variety of products such a s piping, flooring, wallpaper, window frames, siding, office equipment, children's toys, and catheters. About 50% of all PVC is used for piping applications. The worst plastic from an environmental and human health perspective, PVC introduces myriad hazards throughout its lifecycle. The manufacturing of PVC creates dioxin, the most potent carcinogen known, as well as ethylene dichloride and vinyl chloride. These toxins can cause severe health problems including cancer, endocrine disruption, and neurological damage. As well as birth defects, and reproductive and immune damage.

HDPE	PVC
Chlorine – Free	Contains chlorine
No dioxin produced in manufacture	Dioxin produces and manufactured
High abrasion and chemical resistance	Moderate abrasion and chemical resistance
Less susceptible to surge shocks	More susceptible to surge shock
Seamless joint connection	Joints leak
Flexible	Rigid
High/long Service life	Short service life (starts to crumble)

Zero Leaks	Sometimes leaks
Environment friendly	Can cause severe health problems
Lightweight	Lightweight
Perfect for trench less	Breaks and cracks under ground if
Lower life cycle cost	High life cycle cost (needs to be Replaced every so often)
Chemical and corrosion resistant	Not chemical resistant and danger to your health
Low maintenance	High maintenance
Impact- resistant and tough	Breaks, cracks and crumbles

Cost

Material prices are comparable to PVC. However, material cost may not be the determining in pipe selection. Contractors who have never used HDPE may be resistant to working with an unfamiliar material. HDPE is gaining market share and acceptance by engineers with the OKLAHOMA WATER DISTRICT HAS FOUND THAT HDPE WOULD COST LESS THAT PVC WHEN CONSIDER PROJECTED LEAKS, BREAKS, JOINT FAILURE AND ASSOCIATED WATER LOST. Also, trenchless installations can dramatically reduce both cost and environmental impact of some underground pipe projects.

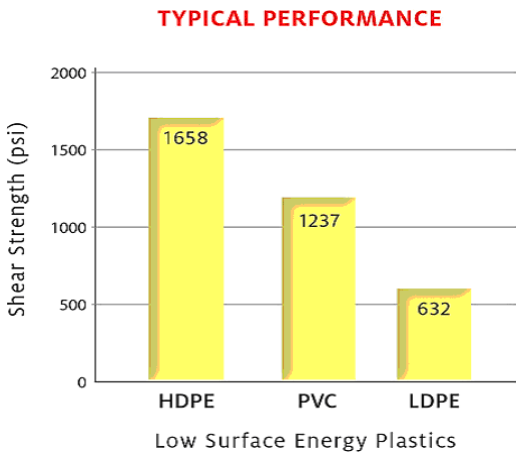
Installation

Because HDPE pipe can be delivered in longer lengths, thus requiring a smaller number of joints, it has better leak resistance than PVC pipe. Also, butt fusion joint welding provides stronger, tighter, more leak proof joint than the bell and spigot or solvent glue joints used for PVC. The longer lengths of HDPE can require that longer trenches are open at one time, although its length and flexibility may allow trench less installations.

Resource Impact

HDPE pipe has a service life of 100 years and can then theoretically be recycled. Recycled HDPE has minimal impact on the environment since it keeps material out of the waste stream. The resin can be more easily recycled than almost any other plastic.
While most recyclable plastic markers are specifically tailored to post – consumer bottles, pipe manufacturer or large end user should be able to find a recycling facility that will accept their HDPE pipe.

Recycling post-consumer PVC is difficult because of its wide range of additives and formulations. It also complicated the recycling of other plastics.



PEXMART
HDPE PIPES & FITTINGS

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