



JEDDAH POLYMER WHERE QUALITY MATTERS

BS 3505/PS 3051

ASTM D-1785

ASTM F-441

ASTM D-2241

DIN 8062

JEDDAH POLYMER 8" CLASS B 6 BAR BS3505/PS3051

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JEDDAH POLYMER - Introduction

JEDDAH POLYMER offers a wide range of uPVC, cPVC piping systems conforming to highest standards. These pipes are easy to handle and lay. High quality at affordable cost is the hallmark of **JEDDAH POLYMER** pipes & fittings.

JEDDAH POLYMER - Range

JEDDAH POLYMER can provide uPVC, cPVC pipes & fittings of nominal size range from 1/2" to 24" conforming to BS, PS, ASTM and DIN standards.

JEDDAH POLYMER offers

Complete piping systems for a variety of purposes including (but not limited to):

- uPVC, cPVC Pressure pipe for water supply
- uPVC pipes for irrigation
- uPVC pipes for waste and ventilation
- uPVC pipes for drainage and sewerage system
- uPVC perforated and well casing pipes
- uPVC, cPVC pipes for transportation of inorganic acids and salts

JEDDAH POLYMER - Customer Services

JEDDAH POLYMER provides

- Pre sales and after sale services to customer.
- Customer Services department helps to select materials for pipes as designed by the engineers.
- Visits to the Site to help in minimizing the problems during laying and testing.
- Advices for suitable position of air valves and fittings.

JEDDAH POLYMER - Quality Assurance Department

JEDDAH POLYMER has a well equipped quality control Laboratory. Jeddah Polymer does not compromise on quality of product. All the raw material is being tested before the manufacturing.

uPVC PIPE ACCORDING To BS-3505/PS-3051

NOMINAL SIZE	OUTSIDE DIAMETER		CLASS B 6 bar			CLASS C 9 bar			CLASS D 12 bar			CLASS E 15 bar		
			Wall Thickness		Wt/Mtr.	Wall Thickness		Wt/Mtr.	Wall Thickness		Wt/Mtr.	Wall Thickness		Wt/Mtr.
INCH	min. mm	max. mm	Min. mm	Max. mm		Min. mm	Max. mm		Min. mm	Max. mm		Min. mm	Max. mm	
1/2"	21.2	21.5	-	-	-	-	-	-	-	-	-	1.7	2.1	0.15
3/4"	26.6	26.9	-	-	-	-	-	-	-	-	-	1.9	2.5	0.22
1"	33.4	33.7	-	-	-	-	-	-	-	-	-	2.2	2.7	0.32
1 1/4"	42.1	42.4	-	-	-	-	-	-	2.2	2.7	0.41	2.7	3.2	0.5
1 1/2"	48.1	48.4	-	-	-	-	-	-	2.5	3.0	0.54	3.1	3.7	0.65
2"	60.2	60.5	-	-	-	2.5	3.0	0.68	3.1	3.7	0.82	3.9	4.5	1.03
2 1/2"	75.0	75.3	-	-	-	3.0	3.5	1.01	3.9	4.5	1.2	4.8	5.5	1.58
3"	88.7	89.1	2.9	3.4	1.17	3.5	4.1	1.41	4.6	5.3	1.82	5.7	6.6	2.22
4"	114.1	114.5	3.4	4.0	1.78	4.5	5.2	2.32	6.0	6.9	3.03	7.3	8.4	3.65
5"	140.0	140.4	3.8	4.4	2.44	5.5	6.4	3.49	7.3	8.4	4.55	9.0	10.4	5.51
6"	168.0	168.5	4.5	5.2	3.46	6.6	7.6	5.01	8.8	10.2	6.57	10.8	12.5	7.95
8"	218.8	219.4	5.3	6.1	5.3	7.8	9.0	7.72	10.3	11.9	10.05	12.6	14.5	12.17
10"	272.6	273.4	6.6	7.6	8.26	9.7	11.2	11.97	12.8	14.8	15.59	15.7	18.1	18.89
12"	323.4	324.3	7.8	9.0	11.5	11.5	13.3	16.85	15.2	17.5	21.91	18.7	21.6	26.68

uPVC ASTM D-1785 SCHEDULE 40

Nominal Size Inches	Outside Dia (d) mm	Wall Thickness		Wt/Mtr. Kg.	Pressure Rating P.S.I.
		Min. mm	Max. mm		
1/2"	21.34	2.77	3.28	0.24	600
3/4"	26.67	2.87	3.28	0.33	480
1"	33.40	3.38	3.89	0.48	450
1 1/4"	42.16	3.56	4.06	0.65	370
1 1/2"	48.26	3.68	4.19	0.77	330
2"	60.32	3.91	4.42	1.04	280
2 1/2"	73.12	5.15	5.77	1.62	300
3"	88.90	5.49	6.15	2.14	260
4"	114.30	6.02	6.73	3.05	220
6"	168.28	7.11	7.98	5.37	180
8"	219.08	8.18	9.20	8.11	160

uPVC ASTM D-1785 SCHEDULE 80

Nominal Size Inches	Outside Dia (d) mm	Wall Thickness		Wt/Mtr. Kg.	Pressure Rating P.S.I.
		Min. mm	Max. mm		
1/2"	21.34	3.73	4.24	0.309	850
3/4"	26.67	3.91	4.42	0.418	690
1"	33.40	4.55	5.08	0.614	630
1 1/4"	42.16	4.85	5.44	0.85	520
1 1/2"	48.26	5.08	5.69	1.03	470
2"	60.32	5.54	6.20	1.43	400
2 1/2"	73.12	7.01	7.25	2.5	390
3"	88.90	7.62	8.53	2.91	370
4"	114.30	8.56	9.58	4.26	320
6"	168.28	10.97	12.29	8.13	280
8"	219.08	12.70	14.20	12.4	250

uPVC ASTM F-441 SCHEDULE 80

Nominal Size Inches	Outside Dia (d) mm	Wall Thickness		Wt/Mtr. Kg.	Pressure Rating P.S.I.
		Min. mm	Max. mm		
1/2"	21.34	3.73	4.24	0.338	850
3/4"	26.67	3.91	4.42	0.457	690
1"	33.40	4.55	5.08	0.671	630
1 1/4"	42.16	4.85	5.44	0.928	520
1 1/2"	48.26	5.08	5.69	1.13	470
2"	60.32	5.54	6.20	1.56	400
3"	88.90	7.62	8.53	3.18	370
4"	114.30	8.56	9.58	4.65	320
6"	168.28	10.97	12.29	8.87	280
8"	219.08	12.70	14.20	13.3	250

uPVC ASTM D-2241 SDR-SERIES

Nominal Size Inches	Outside Diameter mm	Wall Thickness Min. mm	Wt/Mtr Kg
2" SDR-26	60.3	2.80	0.768
3" SDR-32.5	88.9	2.70	1.093
4" SDR-41	114.3	2.78	1.667
4" SDR-32.5	114.3	3.51	2.082
6" SDR-64	168.3	3.20	2.450
6" SDR-41	168.3	4.12	3.445
8" SDR-41	219.1	5.33	5.988

CHEMICAL PROPERTIES:

uPVC pipes are highly resistant to aqueous salt solution, mineral acids and alkalis. Some hydrocarbons are absorbed by uPVC and cause swelling and loss of strength. These changes are, however largely restored when the hydro-carbons are allowed to evaporate from the pipe. uPVC is virtually unaffected by water.

PVC pipe is not recommended for use with organic esters, ketones, chlorinated solvents, aromatic hydro-carbons reagents and low molecular weight alcohols.

Resistance of Jeddah Polymer uPVC pipes to common Chemicals under normal Condition

Mineral Acids	Hydrochloric (Muriatic) acid-30%	Recommended
	Sulphuric Acid 50%	Recommended
	Sulphamic Acid 30%	Recommended
Alkalies	Ammonium Hydroxide	Recommended
	Calcium Hydroxide	Recommended
	Sodium Hydroxide	Recommended
Salts	Calcium Chloride	Recommended
	Potassium Chloride	Recommended
	Sodium Bicarbonate	Recommended
	Sodium Chloride	Recommended
	Sodium Phosphate	Recommended
Oxidising Agents/Disinfectants	Sodium Hydrochloride (Bleach Solu)	Recommended
	Chlorine Water	Recommended
	Calcium Hypochlorite-Soln. 18%	Recommended
Organic Acid	Acetic-Acid-10%	Recommended
	Stearic Acid	Recommended
	Hydroxy Acetic Acid	Recommended
Oils & Derived Products	Crude Oil Sour	Recommended
	Diesel Fuel	Recommended
	Gasoline	Recommended
	Lubricating & Thread Cutting Oils	Recommended
	Motor Oil	Recommended
Solvents	Aceton	Not Recommended
	Methyl Ethyl Ketone	Not Recommended
	Toluene	Not Recommended
	Trichloroethylene	Not Recommended
	Turpentine	Recommended
	Xylent	Not Recommended
Gases	Soap & Detergents	Recommended
	Ammonia	Recommended
	Carbon dioxide	Recommended
	Hydrogen Sulfide	Recommended
	Natural Gas	Recommended
	Oxygen	Recommended

PHYSICAL PROPERTIES:

S.No.	PROPERTY	VALUE	UNIT
A. General			
1.	Specific Gravity	1.42-1.46	
2.	Inflammability	will not support	Combustion
3.	Water absorption (24 Hours At Ambient temperature)	0.07	%
B. Electrical			
1.	Dielectric Constant (800 Cycle)	3.0	
2.	Dielectric Strength	425	Volts/mil
C. Thermal			
1.	Specific Heat At 20°C	0.24	Cal/gm/ °C
2.	Vicat softening point	85	°C
3.	Heat Distortion temperature AT 18.5 kfg/cm ²	75	°C
4.	Thermal Conductivity	7-8x10 ⁻⁵	Cal m/m ² h°C
5.	Coefficient of linear expansion	7-8	m/m/ °C
D. Mechanical			
1.	Tensile Strength AT 23°C	450 - 600	kgf/cm ²
2.	Modulus of elasticity AT 20°C	30,000	kgf/cm ²
3.	Elongation AT break	>80%	
4.	Impact strength At 0°C	0.5	ft lb/in of Notch
5.	Impact strength at 20°C	1-2	ft lb/in of Notch
6.	Compressive strength	600 - 700	kgf/cm ²
7.	Bending Strength	1000	kgf/cm ²

ADVANTAGES OF JEDDAH POLYMER uPVC PIPES

Jeddah Polymer uPVC pressure pipes provide the following distinct advantages:

- Simple to join and quick to install.
- Flexible and resistant to breakage.
- Easy to transport.
- Total resistance to corrosion, abrasion, growth of bacteria, algae and fungi.
- Light in weight, durable and economical.
- Non-Flammable/self-extinguishing. Does not support combustion.
- Exceptional chemical resistance to most acids, alkalis and halogens.
- Non-toxic and non-conductive.
- Smooth bore with excellent hydraulic characteristics, low frictional losses and high flow capabilities.
- Maintenance free