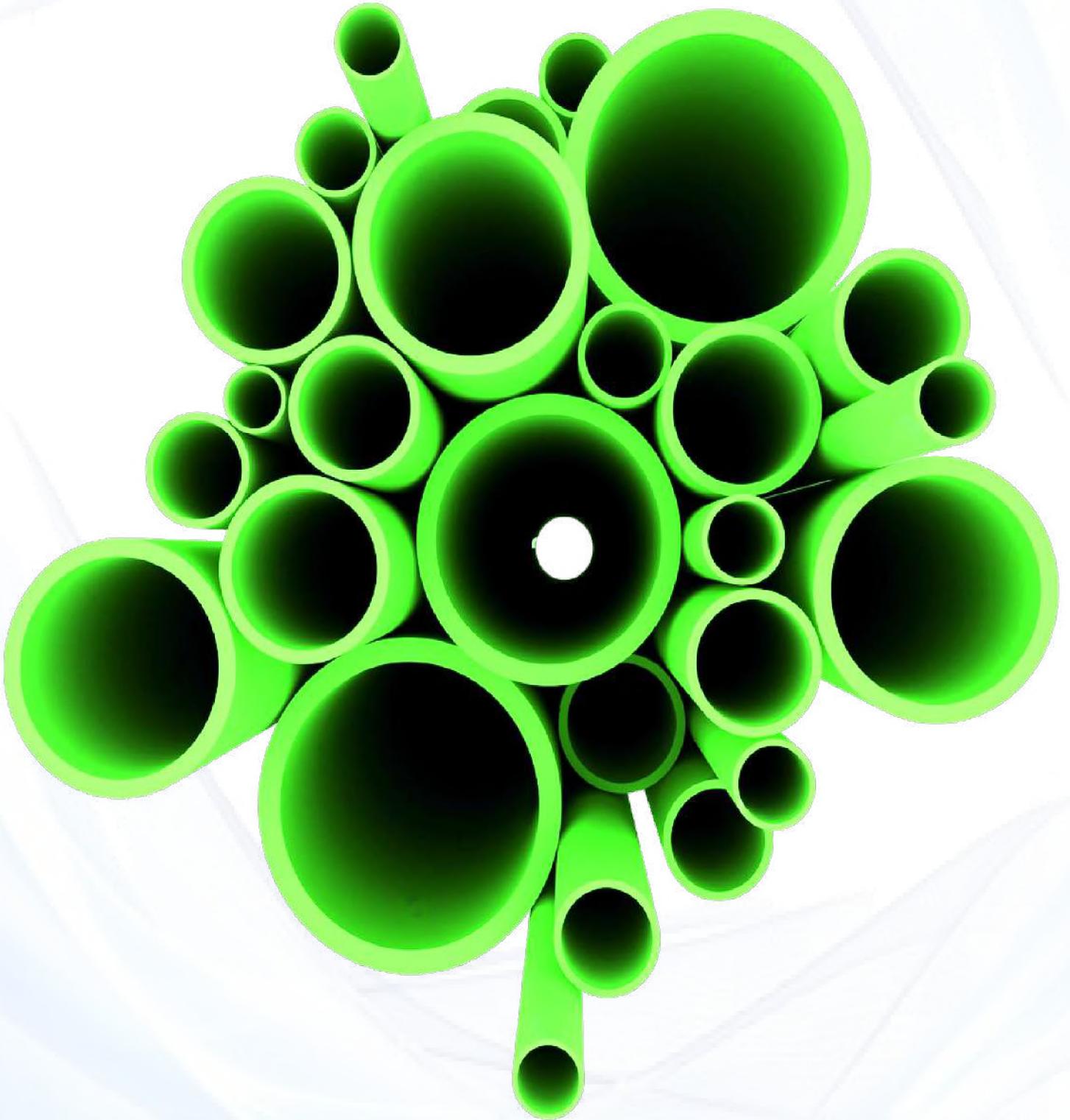




الراجحي AL-RAJHI

# PPR PIPES



## PPR GENERAL PROPERTIES

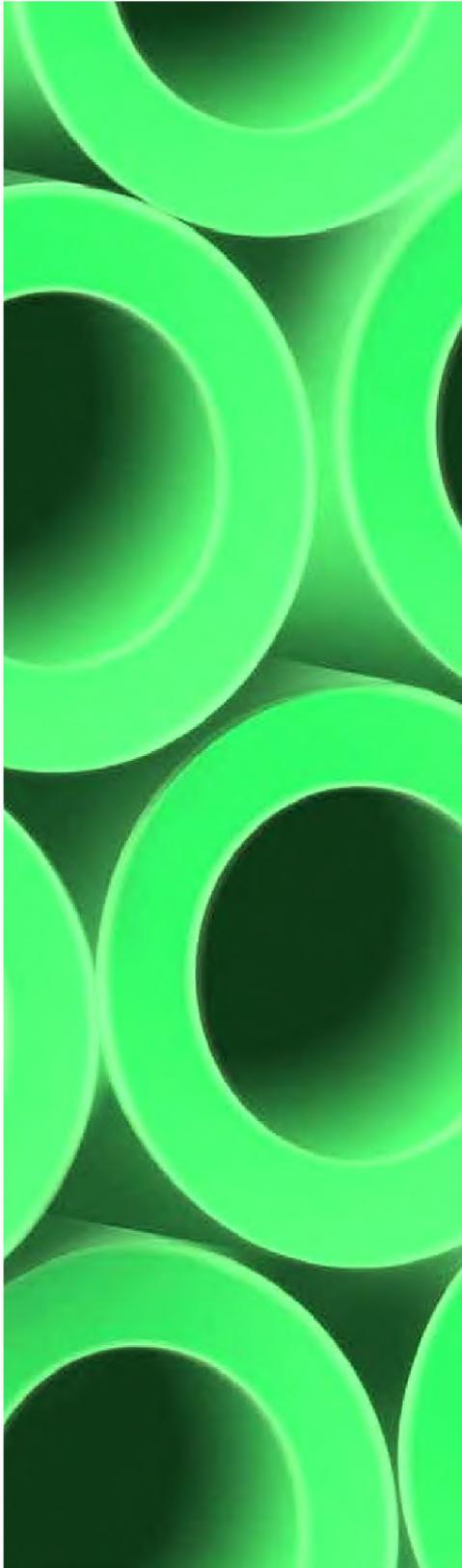
### Mechanical & Thermal Properties of PPR

Properties	Unit	Value	Test Method
Density	g/cm <sup>3</sup>	0.90	ISO 1183
Melt Flow Index 230°C/2.16kg	g/10min	0.20 -0.45	ISO 1133
Flexural modulus (2mm/min)@23deg.	MPa	800	ISO 178
Tensile Modulus (1mm/min)	MPa	850	ISO 527
Tensile strain at Yield (50mm/min)	%	13.50	ISO 527 -2
Tensile stress at Yield (50mm/min)	MPa	25	ISO 527 -2
Thermal conductivity (10-60deg.)	W/m.K	0.24	DIN 52612
Coefficient of Thermal Expansion(0deg- 110deg)	m/Mk	1.5-1.8x10 <sup>-4</sup>	DIN 53752
VICAT softening Temperature (VST/A/50)	°C	130	ISO 306
VICAT softening Temperature (VST/B/50)	°C	69	ISO 306

PPR PIPES: DIN 8077 / 8078

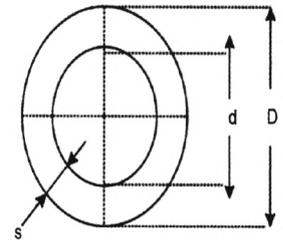
Nominal Size (mm)	Outside Diameter (mm)		WALL THICKNESS (S) (MM)	
			Pipe Series 2.5	
	MIN.	MAX.	MIN.	MAX.
20	20.0	20.3	3.40	4.00
25	25.0	25.3	4.20	4.90
32	32.0	32.3	5.40	6.20
40	40.0	40.4	6.70	7.60
50	50.0	50.5	8.30	9.40
63	63.0	63.6	10.50	11.80
75	75.0	75.7	12.50	14.00
90	90.0	90.9	15.00	16.80
110	110.0	110.9	18.30	20.40



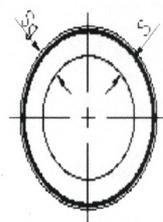


**Al-Rajhi PPR - PIPES**

**Nominal pressure** - Class 2/8 bar  
**Std : dimension ratio** - 6  
**Std : Reference KTP** SASO-ISO  
**standard colour** 15874  
**Green**

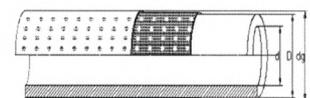


PIPE SIZE	OUTSIDE DIAMETER (D) mm	WALL THICKNESS (S) mm	INTERNAL DIAMETER (d) mm	WEIGHT Kg/m
20 mm	20.0	3.40-4.00	13.20	0.172
25 mm	25.0	4.20-4.90	16.60	0.266
32 mm	32.0	5.40-6.20	21.20	0.434
40 mm	40.0	6.70-7.60	26.60	0.671
50 mm	50.0	8.30-9.40	33.40	1.040
63 mm	63.0	10.50-11.80	42.00	1.650
75 mm	75.0	12.50-14.00	50.00	2.340
90 mm	90.0	15.00-16.70	60.00	3.360
110 mm	110.0	18.30-20.40	73.40	5.010
125 mm	125.0	20.80-23.10	83.40	6.470
160 mm	160.0	26.60-29.40	106.70	10.60

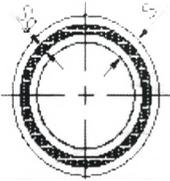


**AL-RAJHI PPR - Black Pipes**

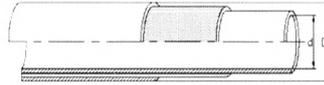
ISO 15874



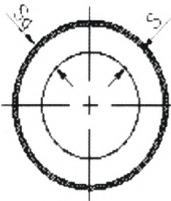
PIPE SIZE	NOMINAL DIAMETER (D) in mm	OUTER DIAMETER (dg) in mm	INTERNAL DIAMETER (d) in mm	NOMINAL THICKNESS (S) in mm	TOTAL THICKNESS (Sg) in mm
Ø 20	20.00	21.80	13.20	3.40-4.00	4.30-4.90
Ø 25	25.00	27.00	16.60	4.20-4.90	5.20-5.90
Ø 32	32.00	34.00	21.20	5.40-6.20	6.40-7.20
Ø 40	40.00	42.20	26.60	6.70-7.60	7.80-8.70
Ø 50	50.00	52.20	33.40	8.30-9.40	9.40-10.50
Ø 63	63.00	65.40	42.00	10.50-11.80	11.70-13.00



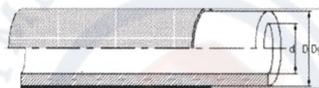
**PPR - FG Pipe**  
DIN 8077/8078 DIN 53769



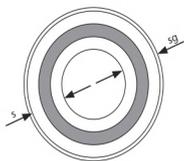
PIPE SIZE	NOMINAL DIAMETER (D) in mm	INTERNAL DIAMETER (d) in mm	NOMINAL THICKNESS (S) in mm	FG THICKNESS (Sg) in mm
Ø 20	<b>20.00</b>	<b>13.20</b>	<b>3.40-4.00</b>	<b>1.33</b>
Ø 25	<b>25.00</b>	<b>16.60</b>	<b>4.20-4.90</b>	<b>1.40</b>
Ø 32	<b>32.00</b>	<b>21.20</b>	<b>5.40-6.20</b>	<b>1.80</b>
Ø 40	<b>40.00</b>	<b>26.60</b>	<b>6.70-7.60</b>	<b>2.23</b>
Ø 50	<b>50.00</b>	<b>33.40</b>	<b>8.30-9.40</b>	<b>2.76</b>
Ø 63	<b>63.00</b>	<b>42.00</b>	<b>10.50-11.80</b>	<b>2.43</b>



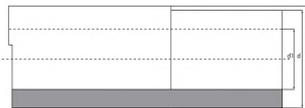
**PPR - PE PIPE**  
DIN 8077/8078, ISO 15874



PIPE SIZE	NOMINAL DIAMETER (D) in mm	OUTER DIAMETER (Dg) in mm	INTERNAL DIAMETER (d) in mm	NOMINAL THICKNESS (S) in mm	TOTAL THICKNESS (Sg) in mm
Ø 20	<b>20.00</b>	<b>21.80</b>	<b>13.20</b>	<b>3.40-4.00</b>	<b>4.30-4.90</b>
Ø 25	<b>25.00</b>	<b>27.00</b>	<b>16.60</b>	<b>4.20-4.90</b>	<b>5.20-5.90</b>
Ø 32	<b>32.00</b>	<b>34.00</b>	<b>21.20</b>	<b>5.40-6.20</b>	<b>6.40-7.20</b>
Ø 40	<b>40.00</b>	<b>42.20</b>	<b>26.60</b>	<b>6.70-7.60</b>	<b>7.80-8.70</b>
Ø 50	<b>50.00</b>	<b>52.20</b>	<b>33.40</b>	<b>8.30-9.40</b>	<b>9.40-10.50</b>
Ø 63	<b>63.00</b>	<b>65.40</b>	<b>42.00</b>	<b>10.50-11.80</b>	<b>11.70-13.00</b>
Ø 75	<b>75.00</b>	<b>77.40</b>	<b>50.00</b>	<b>12.50-14.00</b>	<b>13.70-15.50</b>
Ø 90	<b>90.00</b>	<b>93.00</b>	<b>60.00</b>	<b>15.00-16.80</b>	<b>16.50-18.30</b>
Ø 110	<b>110.00</b>	<b>113.60</b>	<b>73.40</b>	<b>18.30-20.40</b>	<b>20.20-22.00</b>



**FG-PPR - PE PIPE**  
DIN 8077/8078, DIN 53769



PIPE		DIAMETER	WALL THICKNESS	INTERNAL DIAMETER	TOTAL DIAMETER	TOTAL WALL THICKNESS	WEIGHT	
Dimension	Packing (Pcs./Pack)	d	s	d1	dg	sg	kg/m	kg/4m
		mm	mm	mm	mm	mm		
20mm	<b>25</b>	<b>20.00</b>	<b>3.40</b>	<b>13.20</b>	<b>20.44</b>	<b>3.62</b>	<b>0.195</b>	<b>0.779</b>
25mm	<b>20</b>	<b>25.00</b>	<b>4.20</b>	<b>16.60</b>	<b>25.56</b>	<b>4.48</b>	<b>0.307</b>	<b>1.226</b>
32mm	<b>10</b>	<b>32.00</b>	<b>5.40</b>	<b>21.20</b>	<b>32.48</b>	<b>5.64</b>	<b>0.483</b>	<b>1.932</b>
40mm	<b>8</b>	<b>40.00</b>	<b>6.70</b>	<b>26.60</b>	<b>40.56</b>	<b>6.98</b>	<b>0.762</b>	<b>3.046</b>
50mm	<b>5</b>	<b>50.00</b>	<b>8.30</b>	<b>33.40</b>	<b>50.48</b>	<b>8.54</b>	<b>1.232</b>	<b>4.927</b>
63mm	<b>3</b>	<b>63.00</b>	<b>10.50</b>	<b>42.00</b>	<b>63.48</b>	<b>10.74</b>	<b>1.830</b>	<b>7.320</b>

