

# The PE4710 - PE 100 is a special black polyethylene material for the pipe industry

King PipeGrade is PE4710 - PE 100 material, which is compliant to ASTM 3350 as a standard material. ASTM 3350/4710 PE100 is completely compatible and 100% interchangeable for use in applications that presently use ASTM 3608 - PE 80 material. King PipeGrade is FDA and NSF Standard 14 certified and complies with ANSI/NSF Standard 61 to be used in potable water piping systems.

PE 4710- PE 100 tends to have a higher hydrostatic design basis (HDB) than other resins but most significantly is the notched tensile/slow crack PENT test which is > 10,000 hours vs. 100-200 hours for others.

50 - 100 years service life per ISO CRS 10 MPa @ 20° C.

# PIPEGRADE<sup>®</sup>

## Applications

- Aquaculture
- Chain Guides
- Gas Lines
- Gravity and Force Mains
- Industrial Pipe Processing
- Irrigation
- Municipal Sewer Systems
- Paddles, Weirs and Wear Shoes
- Plumbing Pipes and Fittings
- Water and Sewage Treatment

### **Specifications**

#### **Standard Sheet Sizes**

**in:** 1/8" to 1-1/2" 48" x 96"

**mm:** 8.255mm to 38.1mm 1219mm x 2438.4mm

**in:** 1-1/2" to 4" 48" x 96"

**mm:** 38.1mm to 101.6mm 1219.2mm x 2438.4mm

**in:** 1/4" to 1-1/2" 60" x 120'

**mm:** 6.35mm to 38.1mm 1524mm x 3048mm

#### Standard Color



Black

Note: Color accuracy can vary considerably on computer monitors and printers. Please consult your distributor for a product sample before making critical color choices.

#### Standard Gauges 48" x 96"

in:	1/8"	3/16"	1/4"	3/8"	1/2"	5/8"	3/4"	1"
mm:	3.75mm	4.76mm	6.35mm	9.53mm	12.7mm	15.875mm	19.05mm	25.4mm
in:	1-1/4"	1-1/2"	1-3/4"	2"	2-1/2"	3"	3-1/2"	4"
mm:	31.75mm	<sup>l</sup> 38.1mm	44.45mm	<sup>l</sup> 50.8mm	63.5mm	<sup>1</sup> 76.2mm	88.9mm	101.6mm

#### Standard Gauges 60" x 120"

in:	1/4"	1	1/2"		3/4"		1"	-	1-1/2"
mm:	6.35mm	Ĺ	12.7mm	i	19.7mm	Ĺ	25.4mm	Ĺ	31.75mm

#### Approximate Weight 48" x 96"

lbs:	20 lbs	30 lbs	60 lbs	80 lbs	100 lbs	120 lbs	160 lbs	200 lbs	240 lbs
kg:	9.07kg	13.61kg	27.21kg	36.29kg	45.36kg	54.43kg	72.58kg	90.72kg	108.9kg
lbs:	280 lbs	320 lbs	360 lbs	400 lbs	480 lbs	570 lbs	640 lbs	I	
kg:	127kg	145.15kg	163.30kg	i 181.44kg i	217.72kg	258.5kg	290.3kg	i	

#### Approximate Weight 60" x 120"

lbs:	62.5 lbs	<sub>I</sub> 125 lbs	<sub>I</sub> 187.5 lbs <sub>I</sub>	<sub>l</sub> 250 lbs <sub>l</sub>	375 lbs
kg:	28.35kg	56.7kg	85.04kg	113.4kg	170.01kg

#### **Tolerance Information:**

#### K-Stran™

Gauges 1/8" through 1-1/2" ± 5% | Length and width plus only at room temperature

#### **Compression Molding**

Gauges greater than 1" and under 1-1/2" ± 10% | Gauges 1-1/2" and greater plus only | Length and width plus only at room temperature

Custom thickness up to 25"/635mm with our King Size Blocks and Massive Shapes

Custom Sizes Available up to 96" width and 100'+ in length

Properties	Units	ASTM	Nominal Values
Density	g/cc	D792	0.961
Tensile Strength @ Yield	psi	D638	3,630
Tensile Strength @ Break	psi	D638	>5,510
Elongation @ Break	%	D638	600
Flexural Modulus 2% secant	psi	D790	150,000
Notched Izod Impact	ft.lbs./in.2	D256	9.2
Brittleness Temperature	°C (°F)	D746	-118°C (-180°F)
Vicat Softening Temperature	°C (°F)	D1525	126°C (259°F)
Environmental Stress Crack Resistance	hrs	D1693C	>5000
Notch Tensile (PENT)	hrs	F1473	>10,000



1100 N. Toledo Blade Blvd. | North Port, FL 34288 USA **P:** 941.493.5502 | **F:** 941.497.3274 | www.kingplastic.com