



The PE 100 Special Black Polyethylene Material for the Pipe Industry

King PipeGrade® is 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 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.

KING PIPEGRADE®

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	38.1mm	44.45mm	50.8mm	63.5mm	76.2mm	88.9mm	101.6mm

Standard Gauges 60" x 120"

in: 1/4"	1/2"	3/4"	1"	1-1/2"
mm: 6.35mm	12.7mm	19.7mm	25.4mm	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		
kg: 127kg	145.15kg	163.30kg	181.44kg	217.72kg	258.5kg	290.3kg		

Approximate Weight 60" x 120"

lbs: 62.5 lbs	125 lbs	187.5 lbs	250 lbs	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 @ Break	psi	D638	5,510
Tensile Strength @ Yield	psi	D638	3,630
Elongation @ Break	%	D638	600
Flexural Modulus 2% secant	psi	D790	150,000
Izod Impact, Notched	ft.lbs./in. ²	D256	9.2
Brittleness Temp.	°C (°F)	D746	-118°C (-180°F)
Vicat Softening Temp.	°C (°F)	D1525	126°C (259°F)
Environmental Stress Crack Resistance	hrs	D1693C	>5,000
Notch Tensile (PENT)	hrs	F1473	>10,000



King Plastic Corporation
Our Innovation. Your Imagination.®

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