



King Performance Commodity High-Density Polyethylene

King KPC HDPE is a high-density polyethylene material. It is the product of a proprietary process called K-Stran™, the most advanced manufacturing process for superior flatness and consistency for gauges up to 1 -1/2" thick. Larger gauges are manufactured in our state-of-the-art compression mold or extrusion mold. King KPC HDPE has a natural, smooth gloss finish on both sides of the sheet. It is extremely versatile with outstanding properties and good chemical resistance for a wide variety of applications at a very competitive cost. King KPC HDPE natural is FDA and USDA approved material that can be used for food containers and food equipment.* The material is easy to machine and fabricate.

King KPC HDPE is upgradable to King MicroShield® with an advanced antimicrobial technology for protecting the product surface against stain and odor causing bacteria, algae and fungi.**

King KPC HDPE is upgradable with King FlameShield, for ASTM E-84 Class A Flame Compliance and CAN/ULC-S102 for Canadian Compliance.

For more information about King MicroShield® and King FlameShield, please visit those product pages.

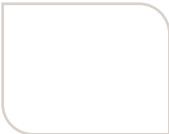
Applications

- Brush Blocks
- Containment Tanks
- Livestock Containment
- Material Handling Systems
- Machined Parts
- Skating Rinks
- Wear Strips

Specifications

Standard Sheet Size

in: 48" x 96"
mm: 1219 mm x 2438 mm



Natural

Note: Color accuracy can vary considerably on computer monitors and printers. Please consult your distributor for a product sample before making critical color choices.
Disclaimer: King MicroShield® may affect color.
King FlameShield may affect finish and color.

*This product does not protect users or others against foodborne bacteria. Always clean this product thoroughly after each use.
**For bacteriostatic, fungistatic, & algistatic properties. This product is exempt from registration under 40 CFR 152.25(a). King MicroShield® effectiveness verified by ISO and ASTM standards. This product does not protect users or others from disease-causing bacteria. Always clean this product thoroughly after use.

Standard Gauges

in:	1/8"	3/16"	1/4"	3/8"	1/2"	5/8"	3/4"	1"	1-1/4"	1-1/2"
mm:	3.18 mm	4.76 mm	6.35 mm	9.53 mm	12.7 mm	15.88 mm	19.05 mm	25.4 mm	31.75 mm	38 mm

in:	1-3/4"	2"	2-1/4"	2-1/2"	3"	4"
mm:	44.75 mm	50.8 mm	57.15 mm	63.5 mm	76.2 mm	101.6 mm

Approximate Weight

lbs:	20 lbs	30 lbs	40 lbs	60 lbs	80 lbs	100 lbs	120 lbs	160 lbs	200 lbs	240 lbs
kg:	9 kg	13.6 kg	18 kg	26 kg	32 kg	45 kg	54.4 kg	72.5 kg	90.7 kg	109 kg

lbs:	280 lbs	320 lbs	360 lbs	400 lbs	480 lbs	640 lbs
kg:	127 kg	145.15 kg	163.29 kg	181.43 kg	217.7 kg	290 kg

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
Note: HDPE Black gauges run from 1/8" through 1"
Custom thickness up to 25"/635 mm with our King Size Blocks and Massive Shapes
Custom sheet sizes, gauges and colors available

Properties	Units	ASTM	Nominal Values
Density	g/cc	D1505	0.955
Tensile Strength @ Yield	psi	D638	>4,100
Tensile Modulus	psi	D638	255,000
Elongation @ Break	%	D638	>600
Elongation @ Yield	%	D638	9.8
Flexural Modulus	psi	D790	185,000
Flexural Stress @ 5% Strain	psi	D790	3,810
Compressive Properties 10% Strain	psi	D695	4,950
Durometer	Shore D	D2240	68
Tensile Impact	ft.lbs./in. ²	D1822	115
Izod Impact Resistance	ft.lbs./in. ²	D256	1.1
Brittleness Temp.	°C (°F)	D746	<-76°C (<-105°F)
Vicat Softening Temp.	°C (°F)	D1525	128°C (262°F)
Heat Deflection Temp. @ 66 psi	°C (°F)	D648	99°C (210°F)
Screw and Nail Withdrawal	lbs	D1761	657 & 63

All values are determined on specimens prepared according to ASTM. | Nominal values should not be interpreted as specifications. | King KPC HDPE is made entirely from FDA and USDA approved material. | King KPC HDPE meets ASTM D4976.



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Our Innovation. Your Imagination.®

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