

# King KPC HDPE Offers Superior Corrosion and Chemical Resistance. It is Made With FDA, USDA and FPA Approved Materials

King KPC high-density polyethylene is produced with our proprietary K-Stran™ process for unsurpassed flatness and quality up to 1-1/2″ in thickness. For larger gauges, our state-of-the-art compression molding system is utilized to create the same quality sheets, slabs and massive shapes. King KPC HDPE natural is FDA, USDA and FPA approved material that can be used for food containers and food equipment.\* 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 has a low coefficient of friction and can be easily cut, machined, welded, and thermoformed for easy fabrication. It may be used for some structural fabrication because of its superior tensile strength. It is moisture resistant, impact resistant and has great abrasion resistance. The material will not splinter or rot; resists stain and odor causing bacteria; and is very resistant to cleaning agents. For best cleaning results refer to Chemical Resistance Chart.

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 or B Flame/Smoke Compliance and CAN/ULC-S102 for Canadian Compliance.

For more information about King MicroShield® and King FlameShield, please visit www.kingplastic.com

# Applications

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

## **Specifications**

## **Standard Sheet Size**

48" x 96"

mm: 1219mm x 2438mm

## Standard Colors



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.

Natural King FlameShield may affect finish and color.

\*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 foodborne and 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	1-1/2"
mm:	3.18mm	4.76mr	n	6.35mm	9.53mm		12.7mm	15.88mm	19.05mm	25.4mm	31.75mm		38mm
in·	1_3///"	2"	ī	2-1///"   3	0_1/2"	2	211	۸"					

**mm:** 44.75mm | 50.8mm | 57.15mm | 63.5mm | 76.2mm | 101.6mm

## **Approximate Weight**

lbs:	20lbs	30lbs	40lbs	60lbs	80lbs   1	100lbs   1	20lbs   160lbs	200lbs   240lbs
kg:	9kg	13.6kg	18kg	26kg	32kg	45kg   5	54.4kg   72.5kg	90.7kg   109kg
lbs:	280lbs	320lbs	360lbs	400lbs	480lbs   6	540lbs		
kg:	127kg	145.15kg	g   163.29kg	181.43kg	217.7kg   2	290kg		

#### **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"/635mm 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
Bittleness Temp.	°C (°F)	D746	<-76°C (<-105°F)
Vicat Softening Temp.	°C (°F)	D1525	123°C (253°F)
Heat Deflection Temp @ 66 psi	°C (°F)	D648	75°C (167°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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