



## 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 exclusive antimicrobial additive from Biosafe®, the latest 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.

### 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:** 1219mm x 2438mm

Active ingredient (Biosafe®).....antimicrobial siloxane EPA Reg. No. 83019-1

\*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.

Biosafe® is a registered trademark of BIOSAFE, Inc.: Patent number 7,851,653 and 7,858,141.

## 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:** 3.18mm | 4.76mm | 6.35mm | 9.53mm | 12.7mm | 15.88mm | 19.05mm | 25.4mm | 31.75mm | 38mm

**in:** 1-3/4" | 2" | 2-1/4" | 2-1/2" | 3" | 4"

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

## Approximate Weight

**lbs:** 20lbs | 30lbs | 40lbs | 60lbs | 80lbs | 100lbs | 120lbs | 160lbs | 200lbs | 240lbs

**kg:** 9kg | 13.6kg | 18kg | 26kg | 32kg | 45kg | 54.4kg | 72.5kg | 90.7kg | 109kg

**lbs:** 280lbs | 320lbs | 360lbs | 400lbs | 480lbs | 640lbs

**kg:** 127kg | 145.15kg | 163.29kg | 181.43kg | 217.7kg | 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

# Standard Colors



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.

## Properties

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. <sup>2</sup>	D1822	115
Izod Impact Resistance	ft.lbs./in. <sup>2</sup>	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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