



King Performance Commodity Low-Density Polyethylene

King KPC LDPE is a low-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 up to 4" thick are manufactured in our state-of-the-art compression mold or extrusion mold. King KPC LDPE has a natural, smooth gloss finish on both sides of the sheet. It is extremely versatile with outstanding properties and good chemical resistance making it ideal for a wide variety of applications such as stencils, orthopedics, packaging, sound deadening, and the automotive applications. Other applications may include trays, general-purpose containers, food storage, laboratory containers, and corrosion-resistant work surfaces. King KPC LDPE natural is FDA and USDA approved material that can be used for food containers and food equipment.* It is ideal for applications where corrosion resistance is a factor, but stiffness, high temperatures and structural strength are not. The material is easy to machine and fabricate.

Applications

- Electrical Insulators
- Die Cut Parts
- Food Storage
- Neutron Shielding
- Orthopedic and Prosthetic Appliances
- Root Barriers
- Stencils
- Vacuum-Formed Parts

Specifications

Standard Sheet Size

in: 48" x 96"

mm: 1219 mm x 2438 mm

Standard Gauges

in: 1/16" | 3/32" | 1/8" | 3/16" | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1-1/4"
mm: 1.6 mm | 2.4 mm | 3.2 mm | 4.8 mm | 6.4 mm | 9.5 mm | 12.7 mm | 19.1 mm | 25.4 mm | 31.8 mm

in: 1-1/2" | 1-3/4" | 2" | 2-1/4" | 2-1/2"
mm: 38.1 mm | 44.5 mm | 50.8 mm | 57.2 mm | 63.5 mm

Approximate Weight

lbs: 9.5 lbs | 14.3 lbs | 19 lbs | 29 lbs | 38 lbs | 57 lbs | 76 lbs | 95 lbs | 115 lbs | 153 lbs
kg: 4.3 kg | 6.48 kg | 8.6 kg | 13.15 kg | 17.2 kg | 25.85 kg | 34.47 kg | 43 kg | 52.1 kg | 69.39 kg

lbs: 191 lbs | 229 lbs | 305 lbs | 344 lbs | 382 lbs
kg: 86.63 kg | 103.87 kg | 121 kg | 156 kg | 173.27 kg

Tolerance Information:

K-Stran™

Gauges 1/16" 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"/635 mm with our King Size Blocks and Massive Shapes

Custom sheet sizes, gauges and colors available

Standard Color



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.

Properties	Units	ASTM	Nominal Values
Density	g/cc	D1505	0.918
Tensile Strength @ Yield	p.s.i.	D638	>1,400
Elongation @ Break	%	D638	>500
Flexural Modulus	p.s.i.	D790	30,000
Durometer	Shore D	D785	42
Izod Impact, Notched	ft. lbs./in. ²	D256	No Break
Brittleness Temp.	°C (°F)	D746	<-76°C (<-105°F)
Vicat Softening Temp.	°C (°F)	D1525	89°C (192°F)
Heat Deflection Temp. 66p.s.i.	°C (°F)	D648	50°C (122°F)
Haze	%	D1003	12.7
Dart Drop Impact Strength	g	D1709	130
Elmendorf Tear Strength	g	D1922	340

King KPC LDPE meets FDA 21 CFR 177.1520.

King KPC LDPE meets the requirements of Mil-P-23536 Rev A.

King KPC LDPE meets the requirements of EU Food Contract.

King KPC LDPE meets ASTM D4976.

King KPC LDPE is RoHS compliant.



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Our Innovation. Your Imagination.®

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