

# King Performance Commodity Acrylonitrile Butadiene Styrene with Flame Retardant

King KPC ABS FR is an Acrylonitrile Butadiene Styrene material with Flame Retardant known for its gloss surface, hardness, impact and heat resistance, toughness, and electrical insulation properties. It is manufactured in our state-of-the-art compression mold. It has a smooth gloss finish on both sides of the sheet. The advantage of King KPC ABS FR is that this material combines strength and rigidity of the acrylonitrile and styrene polymers with the toughness of the polybutadiene rubber. Physical properties include flame resistance, high impact resistance and high and low temperature performance. King KPC ABS FR is ideal for a variety of industrial applications from prototyping, modeling, electronics to mechanical and automobile applications. The material is easy to machine and fabricate.

# Applications

- Air Conditioning Components
- Industrial Enclosures
- Shelving
- Switches
- Transformer Housings



## **Specifications**

## Standard Color

### **Standard Sheet Sizes**

**in:** 48" x 96"

mm: 1219 mm x 2438 mm



Note: Color accuracy can vary considerably on computer monitors and printers. Please consult your distributor for a product sample before making critical color choices.

Black

**Standard Gauges** 

in: 1/2" | 5/8" | 3/4" | 1" | 1-1/4" | 1-1/2" | 1-3/4" | 2" | 2-1/4" | 2-1/2" mm: 12.7 mm | 15.87 mm | 19 mm | 25.4 mm | 31.75 mm | 38.1 mm | 44.45 mm | 50.8 mm | 57.15 mm | 63.5 mm

**in:** 3" **mm:** 76.2 mm

**Approximate Weight** 

**Ibs:** 101.5 lbs | 128.8 lbs | 152.2 lbs | 202.9 lbs | 253.7 lbs | 304.4 lbs | 355.2 lbs | 405.9 lbs | 456.6 lbs | 507.4 lbs **kg:** 46.03 kg | 58.42 kg | 69.03 kg | 92.03 kg | 115.07 kg | 138.07 kg | 161.11 kg | 184.11 kg | 207.11 kg | 230.15 kg

**lbs:** 608.8 lbs **kg:** 276.14 kg

### **Tolerance Information:**

Gauges 1/2" through under 1-1/2"  $\pm$  10% | Gauges 1-1/2" and greater plus only Length and width plus only at room temperature Custom sheet sizes and gauges available

Properties	Units	ASTM	Nominal Values
Density	g/cc	D1505	1.19
Tensile Strength @ Yield	psi	D638	>6,400
Elongation @ Break	%	D638	20
Flexural Modulus	psi	D790	377,000
Durometer	R Scale	D785	97
Izod Impact	ft.lbs./in.	D256	5.51
Vicat Softening Temp.	°C (°F)	D1525	83°C (181°F)
Heat Deflection Temp. 66psi	°C (°F)	D648	87°C (189°F)
Flammability	Rating	UL94	V-0

Flammability Rating for KPC ABS FR				
Nominal Thickness	Nominal Values Unit UL	Test Method UL 94		
0.0591 in	V-O	UL 94		
0.0787 in	V-O/•5VB	UL 94		
0.0984 in	V-O/•5VB	UL 94		
0.118 in	V-O/•5VB	UL 94		

All values are determined on specimens prepared according to ASTM Standards.

Nominal values should not be interpreted as specifications.

This raw material contains UV stability.

King KPC ABS Black FR is made entirely from FDA approved materials.

King KPC ABS Black FR does not contain any or the 29 substances of very high concern based on the European Chemical Agency.

King KPC ABS Black FR is RoHS Compliant.

