

# KING KPC ABS

*King Performance Commodities*

## King KPC ABS is Easily Machinable and Extensively Used in Prototyping, the Modeling Industry and Other Mechanical Applications

The advantage of King KPC ABS is that this material combines strength and rigidity of the acrylonitrile and styrene polymers with the toughness of the polybutadiene rubber. A variety of modifications have been made to improve impact resistance, toughness and heat resistance. The impact resistance does not fall off rapidly at low temperatures and stability under load is excellent with limited loads. KPC ABS is considered superior for its hardness, gloss, toughness, and electrical insulation properties. KPC ABS is easily machinable and available in smaller sizes. It is extensively used in prototyping, the modeling industry and other mechanical applications.

A growing outlet for ABS is the electronics industry where it is used in business machines, computers, radios, monitors, cell and smart phones. An important market is the automobile sector where it is used in instrument panels, consoles, radiator grills, headlight housings and interior trim parts with growing use in recreational vehicles.

Other applications include domestic appliances such as refrigerators and sewing machines; pipes, fittings and other products used in the construction industry; and recreational goods such as boats and mobile homes.

King KPC ABS is manufactured in our state-of-the-art compression molding system located in North Port, Florida.

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### Applications

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- Automotive Parts
- Industrial Enclosures
- Machine Parts
- Prototype Modeling
- Short Run Production Parts

## Specifications

### Standard Sheet Sizes

**in:** 24" x 48"                      48" x 96"  
**mm:** 610mm x 1219mm          1219mm x 2438mm

**Black & Natural:** 24" x 48" and 48" x 96", gauges starting at 1/16" up to 4"

**White:** 48" x 96" only, gauges starting at 3/8" up to 4"

### Standard Gauges

**in:** 1/16" | 1/8" | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 1" | 1-1/4" | 1-1/2"  
**mm:** 1.587mm | 3.175mm | 6.35mm | 8.81mm | 12.7mm | 15.87mm | 19mm | 25.4mm | 31.75mm | 38.1mm

**in:** 1-3/4" | 2" | 2-1/4" | 2-1/2" | 3" | 4"  
**mm:** 44.45mm | 50.8mm | 57.15mm | 63.5mm | 76.2mm | 101.6mm

### Approximate Weight per Sq. Ft.

**lbs:** .3375lbs | .675lbs | 1.35lbs | 2lbs | 2.7lbs | 3.4lbs | 4.1lbs | 5.4lbs | 6.75lbs | 8.1lbs  
**kg:** .153kg | .306kg | .612kg | .907kg | 1.224kg | 1.54kg | 1.85kg | 2.45kg | 3.06kg | 3.67kg

**lbs:** 9.5lbs | 10.8lbs | 12.15lbs | 13.5lbs | 16.2lbs | 21.6lbs  
**kg:** 4.3kg | 4.89kg | 5.51kg | 6.12kg | 7.35kg | 9.8kg

### Tolerance Information:

#### Compression Molding

Gauges 1/16" through under 1-1/2" ± 10% | Gauges 1-1/2" and greater plus only | Length and width plus only at room temperature  
 Custom gauges available upon request

Properties	Units	ASTM	Nominal Values Black/Natural ABS	Nominal Values White ABS
Density	g/cc	D1505 / D792	1.03	1.04
Tensile Strength @ Break	%	D638	40	24
Elongation @ Yield	psi	D638	>6,000	>6,400
Flexural Modulus	psi	D790	300,000	333,000
Flexural Strength	psi	D790	10,700	9,430
Durometer	R Scale	D785	102	102
Izod Impact	ft.lbs./in.	D256	7.7	6.0
Vicat Softening Temp.	°C (°F)	D1525	104°C (219°F)	99°C (210°F)
Heat Deflection Temp. 66psi	°C (°F)	D648	94°C (201°F)	97°C (206°F)
Flammability	Rating	UL94	HB	HB

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

Nominal values should not be interpreted as specifications.

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

King KPC ABS Natural is made entirely from FDA approved materials.

King KPC ABS White is made entirely from FDA approved materials.

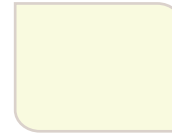
King KPC ABS Black/Natural/White does not contain any or the 29 substances of very high concern based on the European Chemical Agency.

King KPC ABS Black/Natural/White are RoHS Compliant.

## Standard Colors



Black



Natural



White

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



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