



King Plastic Corporation

King KPC HDPE FAQ

What is King KPC HDPE?

King KPC high-density polyethylene, also referred to as King KPC HDPE, 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 slabs and massive shapes. King KPC HDPE natural is FDA and USDA 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, colored, 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.

*Disclaimer: This product does not protect users or others against foodborne bacteria. Always clean this product thoroughly after each use.

What type of finish?

Smooth gloss finish on both sides.

What colors are available?

King KPC HDPE is available in Natural. Custom colors are available. Please call Customer Service at 941.493.5502.

Can you custom color match?

Yes. Please call Customer Service at 941.493.5502.

What sizes are available?



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King KPC HDPE standard sheet size is 48" x 96". Standard gauges are 1/8", 3/16", 1/4", 3/8", 1/2", 5/8", 3/4", 1", 1-1/4", 1-1/2", 1-3/4", 2", 2-1/4", 2-1/2", 3", 4". Custom sheet sizes and gauges available upon request. Please call Customer Service at 941.493.5502.

Is King KPC HDPE available with an antimicrobial?

Yes. 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.*

Is King KPC HDPE available with a Flame Retardant?

Yes. King KPC HDPE can be upgraded with King FlameShield, for ASTM E-84 Class A or B Flame/Smoke Compliance and CAN/ULC-S102 for Canadian Compliance.

What are the Features and Benefits of King KPC HDPE?

- No volatile organic compounds (VOCs)
- Resistant to common molds and mildew
- Chemical-resistant and easy to clean
- Will not warp, rot, splinter, or delaminate
- No finishing required
- Works like wood
- Easy to fabricate
- FDA approved

How Can I Fabricate and Finish it?

Use standard woodworking tools: table saws, table routers, drills, blades and bits. Carbide router bits with two to four flutes are recommended.

How to Clean and Maintain?

- To clean everyday dirt and stains, use either Mr. Clean Magic Eraser, Soft Scrub® or Simple Green Concentrate at full strength with a nylon scrubby or stiff nylon brush. Scrub lightly; excess force can mar the finish.
- Persistent stains will usually go away if you soak the area with bleach.



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Do not use 100% chlorine used to treat swimming pools.

- To clean a petroleum stain such as grease or oil; use a citrus cleaner, alcohol or mineral spirits.
- For severe petroleum-based stains, spray with WD40[®]. Then use toluene or acetone and a white nylon scrub pad (colored pads release staining dyes when combined with acetone)
- Do not use MEK, turpentine or naphtha solvent
- Furniture polish or products such as Armor-All[®] can add an attractive luster to the finish and hide small surface blemishes. To prevent slipping, do not use these products on walking surfaces.
- If a mark or stain won't come out, you may lightly sand the area. Be careful to only work on the stained area because sanding will remove the matte finish
- Any high-quality silicone marine caulk works well as a gasket material. Regular caulking peels off.

How to Care and Store?

- Store the sheets flat on a level surface
- Keep away from teak oil and other products that can stain the finish
- Use china markers or water-based markers to draw patterns
- Pen marks can usually be removed with household cleaners
- Keep away from heat sources that exceed 180°F
- Because there is no grain, parts can be cut from any area of the sheet
- Save the scraps for small parts, shims, spacers and plugs
- Remnants may be eligible for recycling; contact your distributor or King Plastic Corporation for details

What are common applications?

- Brush Blocks



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

Does King KPC HDPE expand and contract?

Yes, at a rate of 6×10^{-5} in./degree F, changing approximately 1/32 inch for every foot of length or width over a 40° degree temperature change.

Is King KPC HDPE FDA approved?

Yes.

Can I use a CNC machine?

Yes.

Will the material produce dust when fabricating?

No, only small shavings that can be recycled.

Can I use King KPC HDPE for a countertop?

It is not recommended for a countertop.

Can I use glue or paint?

Gluing is not recommended. Because King KPC HDPE sheet products are designed to resist water and grime, they cannot be painted and the use of adhesives is not recommended. Special welding equipment and rods, designed for use with polymer sheets, are also available.