

# King KPC LDPE FAQ

### What is King KPC LDPE?

King KPC low-density polyethylene is produced with our proprietary K-Stran™ process for unsurpassed flatness and quality up to 1-1/2″ in thickness. For gauges up to 4″, our state-of-the-art compression molding system is utilized to create the same quality slabs. We also use a proprietary process that makes massive shapes. King KPC LDPE extruded sheets are very pliable with a low Durometer of 42, and a smooth soft translucent appearance. King KPC LDPE uses a special formulation with the finest FDA and USDA approved materials. Stock sheet is ideal for applications such as stencils, orthopedics, packaging, sound deadening, and the automotive industry. Other applications may include trays, general-purpose containers, food storage, laboratory containers, and corrosion-resistant work surfaces. KPC LDPE sheets are also used for applications where corrosion resistance is a factor but stiffness, high temperatures and structural strength are not.

We also offer our King KPC LDPE in a special grade, which is certified as a barrier material or radiation shielding on nuclear naval warships, submarines and certain medical applications. King Plastic Corporation is certified by prime vendors of the U.S. government as the source for type V neutron shielding material. Our processes, materials, quality programs, sampling testing, and packaging all meet or exceed military specification MIL-P-23536A. King KPC LDPE is RoHS compliant.

# What type of finish?

Smooth gloss finish on both sides.

### What colors are available?

King KPC LDPE 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?

King KPC LDPE standard sheet size is 48" x 96". Standard gauges are 1/16", 3/32", 1/8", 3/16", 1/4", 3/8", 1/2", 3/4", 1", 1-1/4", 1-1/2", 1-3/4", 2", 2-1/4", 2-1/2". Custom sheet sizes and gauges available upon request. Please call Customer Service at 941.493.5502.

## What are the Features and Benefits of King KPC LDPE?

- Extruded sheets are pliable with a low Durometer of 42 and a smooth translucent appearance
- Chemical-resistant and easy to clean
- Corrosion-resistant
- Easy to fabricate
- Made with FDA and USDA approved materials

#### 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?**

- Only routine cleaning with common detergents is required
- Nylon scrub pads and brushes should be used with care because excessive force can mar the finish
- For resistant stains, apply bleach and allow it to soak in
- Use citrus cleaner, alcohol or mineral spirits to remove grease or oil stains

 Automotive silicone spray products or household furniture polish can help hide scratches on the surface. To prevent slipping, do not use these products on walking surfaces.

### **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?

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

# **Does King KPC LDPE expand and contract?**

Yes, at a rate of  $6\times10^{-5}$  in./degree F, changing approximately 1/32 inch for every foot of length or width over a  $40^{\circ}$  temperature change.

# Is King KPC LDPE 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 glue or paint?

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