

## Mechanical Plastics



email us at:  
[sales@regalplastic.com](mailto:sales@regalplastic.com)

### Distribution Centers:

**Kansas City – 816-471-6390**  
**Joplin – 417-782-1420**  
**Springfield – 417-831-3110**  
**St. Louis – 314-427-7722**

**Omaha – 402-344-4446**  
**Des Moines – 515-223-8080**  
**Waterloo – 319-232-8757**  
**La Crosse - 608-784-2334**

**Nashville – 615-242-4800**  
**Wichita – 316-263-1211**  
**Oklahoma City – 405-495-7755**  
**Tulsa – 918-249-0775**  
**Indianapolis – 317-471-8247**

*Your #1 Source  
for Material and  
Fabrication Solutions*



### LDPE (160° F)

Available in Sheet and Rod  
Low Density PE is a lightweight material that is extremely flexible with good impact resistance.

Applications: Prosthetic Devices, Vacuum Formed Parts, Fabricated Parts

### PVC (160° F)

Available in Sheet, Rod and Tube

PVC has excellent chemical and corrosion resistance with good tensile and mechanical strength. PVC also has low moisture absorption, good dimensional stability and low flammability.

Applications: Chemical Processing, Irrigation, Corrosive Resistant Tanks, Corrosive Work Stations

### HDPE (180° F)

Available in Sheet (smooth and textured), Rod, Tube

HDPE is a lightweight, FDA compliant (in Natural) plastic with very good impact resistance, high tensile strength and low moisture absorption.

Applications: Fabricated and Machined Parts, Welded Tanks, Vacuum Formed Parts

### UHMW (180° F)

Available in Sheet, Rod and Tube

UHMW has a unique combination of wear and corrosion resistance, low friction surface and impact strength. UHMW meets FDA, USDA and 3A dairy guidelines.

Applications: Food Processing, Agriculture, Sewage Treatment

### Polypropylene (180° F)

Available in Homopolymer and Copolymer Sheet & Rod

Polypropylene is a lightweight rigid material that is easily fabricated with good impact and electrical properties. It also has excellent chemical and corrosion resistance.

Applications: Fume Hoods, Plating Tanks, Lab Tables

### Acetal (180° F)

Available in Sheet, Rod, Tube and FDA colors

Acetal provides high strength and stiffness coupled with very good dimensional stability and ease of machining. Formulations include copolymer, homopolymer (Delrin), PTFE filled and internally lubricated/enhanced wear grade.

Applications: Food Contact Parts, Bushings, Gears, Rollers, Bearings Wear Plates

### Nylon (200°-250° F)

Available in Sheet, Rod, Tube, Discs and Custom Cast Parts

Nylon's toughness, low coefficient of friction and good abrasion resistance make it an ideal replacement for a variety of material from rubber to metal. There are many grades of nylon by type and additionally by adding fillers you can enhance nylon's properties.

Applications: Wear Plates, Bushings, Bearings, Rollers, Sheaves

### PET/PBT (220° F)

Available in Sheet, Rod and Tube

PET and PBT have high strength and rigidity which makes it a great material for close tolerance parts. It work well in both wet and dry environments, has excellent stain resistance and resists acids better than nylon and Acetal.

Applications: Pistons, Manifolds, Food and Dairy Parts

### Polysulfone (300° F)

Available in Film, Sheet and Rod

Polysulfone is semi-transparent and light amber in color. It is a high performance thermoplastic that is heat resistant and has low ionic impurities.

Polysulfone can be autoclaved.

Application: Food and Medical Parts

### Ultem (338° F)

Available in Film, Sheet and Rod

Ultem is semi-transparent and dark amber in color. It is a high strength material with excellent heat and flame resistance. Ultem is UL 94VO rated and has a high dielectric strength.

Applications: Medical, Analytical Instrumentation, Electrical Insulators

### PPS (425° F)

Available in Sheet, Rod, Tube and Disc

PPS offers the broadest resistance to chemicals of any engineering plastic. It also offers inertness to steam, strong bases, fuels and acid. PPS has excellent dimensional stability.

Applications: High heat, Chemical, Food Processing

### PEEK (485° F)

Available in Film, Sheet, Rod, Tube and Disc

PEEK grades offer chemical and moisture resistance like PPS but can operate at higher temperatures. It has a low rate of thermal expansion and has good dimensional stability. PEEK is UL94VO and FDA compliant (Unfilled).

Applications: Bushings, Bearings, Seals, Wear Rings, Structural Parts

### Teflon (500° F)

Available in Film, Sheet, Rod, Tube and Molded Parts

Teflon is a high heat material with excellent chemical resistance and a low coefficient of friction. A variety of fillers can be used to enhance Teflon's mechanical properties.

Applications: Food, Medical, Chemical and Corrosion

### Torlon (500° F)

Available in Sheet, Rod, Tube and Disc

Torlon maintains strength and stiffness with minimal expansion rate up to 500° F. It has excellent wear resistance in bearing grade and is able to endure harsh thermal, chemical and stress conditions.

Applications: Bushings, Bearings, Seals, Chip Nests, Sockets

### Polyimide (580° F)

Available in Sheet, Rod, Tube and Disc

Polyimide has superior strength and stiffness at elevated temperatures and maintains the lowest wear rates at the highest PV's. It has good chemical resistance and excellent dimensional stability.

Applications: Critical Service Bearings, Bushings, Semiconductor Applications

### Celazole (750° F)

Available in Sheet, Rod, Tube and Disc

Celazole is the highest performance thermoplastic available. It has the highest heat resistance and mechanical property retention over 400° F of any unfilled plastic. It also has the lowest rate of thermal expansion and highest compressive strength.

Applications: Bushings, Bearings, Insulators, Sizing Dies, Vacuum Cups