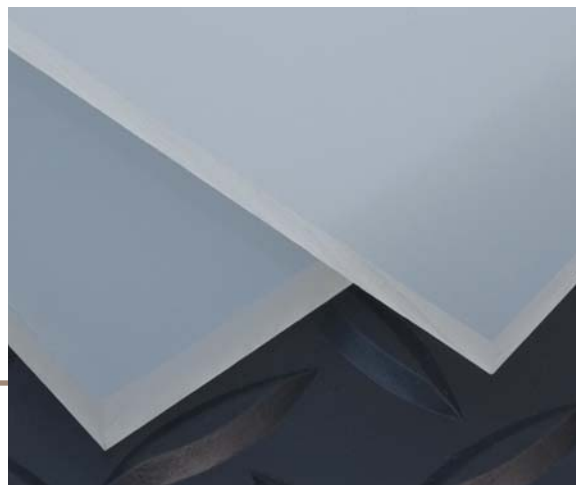


# POLYPROPYLENE

## POLYSTONE® P



Polypropylene is a low cost, chemically resistant plastic material with excellent aesthetic qualities. Polypropylene is easy to weld using thermoplastic welding equipment and is often fabricated into water and chemical tanks.

Polypropylene is available in both homopolymer and copolymer grades. Homopolymer polypropylene is stronger and stiffer than copolymer. Copolymer polypropylene is a bit softer, but it is tougher and more durable than homopolymer polypropylene. Copolymer polypropylene tends to have better stress crack resistance and low temperature toughness than homopolymer.



### KEY CHARACTERISTICS:

- Easy to weld using thermoplastic welding equipment
- Low moisture absorption
- Good chemical resistance
- Low cost
- Extremely tough (copolymer)
- Excellent aesthetic properties
- Easy to fabricate
- FDA compliant grades available

### APPLICATIONS:

- Chemical tanks
- Plating tanks
- Fire truck water tanks (copolymer)
- Cutting boards for food preparation
- Semiconductor equipment cabinets and work surfaces
- Orthotics and prosthetics

### POLYPROPYLENE TYPICAL PROPERTIES:

	UNITS	ASTM TEST	POLYPROPYLENE HOMOPOLYMER	POLYPROPYLENE COPOLYMER
Tensile strength	psi	D-638	5,400	3,800
Flexural modulus	psi	D-790	225,000	215,000
Izod impact (notched)	ft-lbs/in of notch	D-256	1.2	12.5
Heat deflection temperature @66 psi	°F	D-648	210	190
Maximum continuous service temperature in air	°F		-	-
Water absorption (immersion 24 hours)	%	D-570	slight	slight
Coefficient of linear thermal expansion	in/in/°F x 10 <sup>-5</sup>	D-696	-	-

**Standard Sizes: SHEET: 48"x96" (0.062"-4.0" thick), 48"x120" (0.062"-4.0" thick), 60"x120" (0.125"-1.0" thick), 96"x120" (1.5"-4.0" thick), 96"x240" (1.5"-4.0" thick) ROD: diameter 0.25"-10.0"**

Length, width, thickness, and diameter tolerances vary by size and by manufacturer • Custom sizes and colors available upon request • Many of our materials are available as films with thicknesses of 0.029" or less. Values may vary according to brand name. Please ask your Curbell Plastics representative for more specific information about an individual brand.

**Curbell Plastics has been supplying plastic sheet, rod, tube, films, adhesives, sealants, and prototyping materials for over 65 years**



NATIONWIDE  
**1.888.CURBELL**  
[www.curbellplastics.com](http://www.curbellplastics.com)

©2008 Curbell Plastics, Inc. All other trademarks and service marks are property of the respective manufacturers. All statements, technical information and recommendations contained in this publication are presented in good faith, based upon tests believed to be reliable and practical field experience. The reader is cautioned, however, that Curbell, Inc. cannot guarantee the accuracy or completeness of this information, and it is the customer's responsibility to determine the suitability of specific products in any given application. PolyroDataSheet 0308