## Polycarbonate Machine Grade

PC, Polycarb

## Description and Overview

Machine grade polycarbonate is used for applications demanding high stiffness, tensile and impact strength and a low coefficient of liner thermal expansion. It is an amorphous, translucent material that exhibits desirable mechanical and electrical properties as well as excellent dimensional stability.

Machine grade polycarbonate performs continuously in environments from 250°F down to -20°F. Machine grade polycarbonate easily machines to close tolerances, is flame resistant and sees high mechanical retention at elevated temperatures.

## Applications and Uses

Machine grade polycarbonate is easily worked, molded and thermoformed. It can undergo large deformations without cracking or breaking.

- Insulating parts
- Coil bodies
- · Relay components
- Plugs
- Lights and lighting
- Housings
- Protective covers
- Medical consumables
- Automotive light housings
- · Safety engineering

## Properties and Specifications

Full Sheet: 24"x48" (0.5" through 2" thick) Rod: (0.25" through 4.0" diameter)

Property	Machine Grade PC
Specific Gravity	1.20
Water Absorption @ 24 Hours	0.15%
Tensile Strength @ Yield (psi)	10,000
Tensile Modulus (psi)	320,000
Elongation at Break	75%
Flexural Modulus	340,000
Hardness, Rockwell	M75
Shear Modulus (psi)	114,000
Izod Impact Strength (ft-Ibs/in.)	10
Heat Deflection Temperature @ 264psi	280° F
Affixable Properties	Chem / Mech

Properties are typical.

Chem is an abbreviation for chemically affixed with glues, chemicals or adhesives. Mech is an abbreviation for mechanically affixed bonding. Field testing is recommended for any application.

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WARNING: This product can expose you to chemicals including Bisphenol A, CAS 80-05-7, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

