

ACRYLIC AND POLYCARONATE
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Names: Acrylic Polycarbonate
 Plexiglass Lexan
 Lucite

Dimensions: Both can be ordered in sheet or extruded forms. Thickness is nominal (1/4" thickness is actually 0.189" to 0.250")

Price: Acrylic \$1.00 Polycarbonate approx. \$1.50

Physical:

Acrylic

- harder than polycarbonate
- stands up better in heat and weather
- acrylic is clearer than polycarbonate
- can be flame polished and buffed with car polish
- does not yellow in sunlight
- acrylic has a clear edge
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Polycarbonate

- scratches easier than acrylic
- easier to work with, softer and more flexible
- impact resistant will not shatter
- yellows over time with sunlight
- polycarbonate edge is blueish in color

Uses:

Acrylic

- fish tanks
- retail product displays

Polycarbonate

- race car windows
- bullet proof glass
- machine guards
- helmets
- CD's

How to differentiate between acrylic and polycarbonate:

- Bending – acrylic snaps when bent, polycarbonate can be cold formed
- Scratching – use a pointed metal piece – acrylic scratches like ice, polycarbonate scratches like hard butter
- Sawing – acrylic chips and splinters – polycarbonate cuts like wood

Tips for working and forming

Acrylic straight cuts can be made by scoring the surface and snapping like a piece of glass. If sawing use a fine tooth blade. Curved cuts can be made with fine tooth bandsaw blade. Acrylic can be heated and bent.

Polishing is easy with woodworking sanding equipment.

Polycarbonate can be easily worked with woodworking equipment.

When drilling to obtain a clean hole, sandwich and clamp the plastic between 2 pieces of wood.