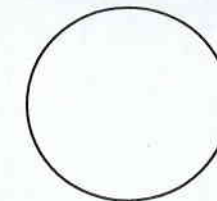
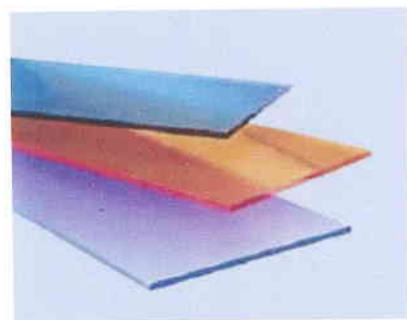


PRODUCT DESIGN

Research-materials and processes



Focus on materials



Acrylic plastic:

Uses:

Sign and display industry, baths, machine guards, furniture, roof lights, glazing, car light lenses.

Note:

Scratches easily and tends to splinter. Polishes well. Breakage resistance is 6-17 times greater than glass

Trade names: Perspex, Plexiglas's.



Polystyrene (High impact)

Uses:

Low cost and disposable items produced by vacuum forming or injection moulding, internal / secondary glazing, toys, model kits, and refrigerator linings.



Polypropylene

Uses:

Chemical resistant containers, hinges, bottle crates, medical equipment (can be sterilized), syringes, food containers (microwaveable), nets, animal feed hoppers, storage boxes with integral hinges.

Note: Naturally pale pink/white in colour

Which material would be best to use and why?

Acrylic has the advantage of being readily available, easy to machine and reasonably tough, but it has the disadvantage of tending to splinter.

High impact polystyrene could also be used, but is only available in 2mm thick sheets

Polypropylene is available for injection moulding process can not make large objects bigger than 50x30x6mm

but it could be used for other smaller parts.