

Polycarbonate Lenses

The most impact resistant of all lens materials is polycarbonate.

Children, athletes, anyone working at a job or hobby where they might get hit in the face and need safety glasses, people with only one eye, those who fall a lot, are natural candidates for polycarbonate lenses.

If safety is a prime concern, choose polycarbonate lenses.

Advantages of polycarbonate lenses:

- Polycarbonate has four to five times the impact resistance of glass or plastic. When glass or plastic lenses break, they do not break into harmless granules, but can break into sharp shards that can enter your eye and destroy your vision. Polycarbonate is far and away the safest of all the lenses made.
- Polycarbonate is the lightest lens material made.
- Polycarbonate lenses naturally provide protection against ultra-violet light, at no additional charge.
- Polycarbonate lenses come with a scratch resistant coating (not scratch proof) at no additional charge.
- Polycarbonate is a high index material, so the lenses will be thinner than if made with glass or plastic.

Disadvantages of polycarbonate lenses:

1. People in prescriptions with higher powers sometimes have trouble seeing out the edges of the lenses--your clear field of vision is not as wide as with glass or plastic lenses. The lenses are made with different curves than are used to make the same prescription power in glass or plastic, so you will see out of these lenses a little differently. People with prescriptions up to plus or minus three diopters (most people) usually have no problem adjusting to polycarbonate lenses.
2. Since you see differently out of polycarbonate lenses, you may have some adjusting to do every time you switch from glasses with polycarbonates lenses to glasses made with glass or plastic lenses. Switching from polycarbonate sports glasses to plastic dress glasses may cause adjustment problems.
3. Polycarbonate lenses are harder to make, so they require more time to manufacture, and are more expensive.
4. In sunglass lenses, polycarbonate can not usually be tinted extremely dark, although the normal sunglass tints can be attained. When safety is a concern, get polycarbonate lenses.