

Used in many consumer and industrial products, polycarbonate plastic made with bisphenol A (BPA) is a shatter-resistant, lightweight, high-performance plastic with toughness, optical clarity, high heat resistance, and excellent electrical resistance.

# **Protective and Corrective Eyewear**

Polycarbonate protects sensitive eyes because it is extremely strong and difficult to break – especially important in eyewear and protective gear for children and emergency responders such as the police and military. Polycarbonate lenses and visors are highly shatter-resistant and, because they are extremely lightweight, they make thinner, lighter lenses that are more comfortable to wear.





#### **Automobiles**

Polycarbonate used in automobiles helps make cars lighter and more fuel efficient (reducing greenhouse gas emissions) while maintaining safety. Polycarbonate window glazing weighs 40-60% less than laminated or tempered automotive glass; the weight reduction translates into better fuel efficiency. Polycarbonate used in sun roofs helps provide greater stability by lowering the vehicle's center of gravity, and impact-resistant, polycarbonate-blend bumpers help protect passengers in collisions.



### **Electronic Equipment**

Polycarbonate plastic provides manufacturers with a cost-efficient and durable material often used in electronic equipment housing units, including cell phones, laptops, tablet computers, PDAs, electronic game consoles, and handheld computer gaming units. The strength of polycarbonate helps prevent the housing units from breaking and polycarbonate films help prevent scratches on the screens.

#### **Compact Discs and DVDs**

Optical discs such as CDs and DVDs, which are read by a laser, are made of polycarbonate. The polycarbonate layer plays an essential role by acting as a lens, focusing the laser beam so it can read the disc, similar to how reading glasses help focus the light for an eye to see clearly.

### **Life-Saving Medical Devices**

Clear, lightweight, shatter-resistant polycarbonate plastic provides a safety barrier that helps protect infants in incubators and allows medical personnel to monitor their health. Polycarbonate is also used to make critical components of many other medical devices where its clarity allows direct observation of blood or other fluids to check for the presence of air bubbles.

## **Food and Storage Containers**

Strong, shatter-resistant polycarbonate – approved by the U. S. Food and Drug Administration as safe for use in food contact – provides a clear view of food in durable and temperature-resistant containers that are reusable and help keep food fresh.

## **Sports Safety Equipment**

Strong, shatter-resistant polycarbonate is used to make helmets and protective eye visors for football, hockey, baseball, snowboarding, and many other sports to help protect children and athletes from injuries.









#### More information on BPA is available at the following websites:

**FDA:** http://www.fda.gov/Food/IngredientsPackagingLabeling/FoodAdditivesIngredients/ucm355155.htm **Health Canada:** www.hc-sc.gc.ca/fn-an/securit/packag-emball/bpa/bpa\_hra-ers- 2012-09-eng.php

ACC: http://plastics.americanchemistry.com/BPA

www.factsaboutbpa.org

