What is ABS Plastic?

Acrylonitrile Butadiene Styrene (ABS) is an opaque thermoplastic and amorphous polymer. Adır Thermoplastic şekl (as opposed to ısı thermoset “) has to use the way the material reacts to heat. The thermoplastics liquefy at a certain temperature (221 degrees in the case of ABS plastic), ie they have a glass transition. It can be heated up to melting points, cooled and re-heated without significant deterioration. Instead of combustion, thermoplastics, such as ABS, allow easy injection molding and subsequent recycling. Conversely, thermoset plastics can only be heated once (typically during the injection molding process). The first heating causes the thermosetting materials (2-part epoxy-like) to be adjusted, causing a chemical change that cannot be reversed. If you tried to heat a thermosetting plastic for a second time to a high temperature, it would simply light up. This ensures that thermosetting materials are poor candidates for recycling. ABS is also an amorphous material, which means that the crystalline solids do not show their sequential properties.

Why is ABS so often used?

ABS has a strong resistance to abrasive chemicals and / or physical effects. The machine is very easy and has a low melting temperature, makes it particularly easy to use in injection molding or 3D printing on an FDM machine. ABS is also among the typical ones, which are currently amongst the typical ones: about $ 1.50, prices (relatively inexpensive Polypropylene ("PP") and Polycarbonate ("PC"). It leads ABS to be used in a wide range of applications in a wide variety of industries.

There are numerous applications for ABS. Among the most commonly identified are the keys on the computer keyboard, the power tool housing, the plastic face shield on the wall outlets (often a PC / ABS blend) and LEGO toys.


ABS1


ABS2


ABS3


ABS4