



What is PBT Plastic?

Polybutylene terephthalate (PBT) is a synthetic semi-crystalline thermoplastic having similar properties and composition with polyethylene terephthalate (PET). It is part of the polyester resins group and has similar characteristics to other thermoplastic polyesters. In addition, it is a high molecular weight high performance material and is generally characterized as a strong, hard and workable plastic. The color changes of PBT range from white to bright colors.

Use of PBT

PBT is found in everyday life and is common in electrical, electronic and automotive parts. The PBT resin and the PBT compound are two types of products used in various applications. The PBT compound comprises a variety of materials which may contain PBT resin, glass fiber filler and additives, the PBT resin comprising only the base resin. The material is usually used in mineral or glass filled grades.

In applications for outdoor use and where fire is important, additives are included to improve the UV and flammability properties. With these modifications, it is possible to have a PBT product which can be used in a large number of industrial applications.

PBT resin is used to make PBT fibers, as well as electronic parts, electrical parts and auto parts. TV set accessories, engine cover sand motor brushes are some examples of the use of PBT compound. It can be used in switches, plugs, coils and handles when reinforced. The unfilled version of PBT is found in some brake cable liners and rods.

When high strength, good dimensional stability, a resistance to various chemicals and a material with good insulation are required, PBT is the preferred choice given its excellent characteristics. The same applies when the bearing and wear properties are the decisive factors in material selection. For this reason, valves, food processing machine parts, wheels and gears are also produced from PBT.



PBT1



PBT2



PBT3



PBT4