

Plastics Material Definitions

Polyethylene Terephthalate (PET)

Polyethylene Terephthalate is a strong, lightweight plastic resin and form of polyester that closely resembles glass in clarity and takes colorants well. PET is commonly used in food packaging due to its strong barrier properties against water vapor, dilute acids, gases, oils and alcohols. PET is also shatter-resistant, slightly flexible and easy to recycle.

High Density Polyethylene (HDPE)

High Density Polyethylene is a rigid, tough and strong resin of natural milky color. HDPE has very good stress crack resistance as well as high impact and melt strength. HDPE is appropriate for personal care, beverages, food and chemicals. It lends itself particularly well to blow molding.

Polypropylene (PP)

Polypropylene is a thermoplastic polymer used in a wide variety of applications, including food, packaging, textiles, laboratory equipment, automotive components, and polymer banknotes. It is unusually resistant to many chemical solvents, bases and acids. It is much less brittle than HDPE. Polypropylene has very good resistance to fatigue, so that most plastic living hinges, such as those on flip-top bottles, are made from this material.