

TPE

Description:

Elastomers are a category of bendable plastic materials that insulate well, are not easily deformed, and can be molded into different shapes. Natural and artificial rubber materials are among elastomers, a special type of polymer. Elastomers are found in many application areas such as skateboard wheels, soles of tennis shoes, insulation surrounding speaker cables and telephone lines.

In everyday work, the “E” is often thrown, and people refer to materials as TPO, TPS, TPV, TPE, TPU and TPA.

All hard/soft TPE combinations have rubber-like properties and are differentiated only by their temperature resistance, chemical resistance, flexibility and their ability to recover under load.

The disadvantages of TPE compared to conventional thermoset rubbers are its lower material properties. TPEs have lower temperature resistance, chemical resistance and worse recovery. The main advantages of Thermoplastic Elastomers are their easy conversion (and low energy cost versus thermosets) via conventional thermoplastic processes such as injection molding, extrusion, thermoforming, blow molding etc. TPEs can also be easily colored and molded with various thermoplastics with good adhesive.

It is regularly in our stocks in granule and burr forms.

Scope of Application:

- Tools, pens, toothbrushes, soft contact parts of razors
- Automotive window insulations, vehicle mats, airbag covers, instrument panel covers
- Cable coverings
- Sports equipment
- Roof membranes
- Toys