

Polypropylene (PP)

Description

Polypropylene is an inexpensive technical plastic with a number of interesting characteristics. Similar to polyethylene, polypropylene belongs to the group of polyolefins. By comparison to HDPE, it is characterized by considerable hardness and rigidity with good stability and adequate tenacity. Compared with PE, it also has a higher heat forming stability, however this is at the expense of insufficient low temperature tenacity.

Characteristics of Polypropylene

- ✓ Low density
- ✓ High rigidity and hardness
- ✓ Good mechanical stability
- ✓ Good heat forming stability
- ✓ Very good chemical stability
- ✓ Good hot water stability (hydrolysis resistance)
- ✓ Low moisture absorption
- ✓ Very good dielectric insulating behavior
- ✓ Non-toxic and physiologically innocuous
- ✓ Inflammable
- ✓ Inexpensive

Please note:

- Damage from stress corrosion in outdoor applications
- Inflammability (although not environmentally polluting)
- Inadequate impact resistance at temperatures below 0°C
- PP is unsuitable for sliding functions
- Difficult adhesion to surfaces which are similar to paraffin