HÄFNER – a standard for quality and precision

Polyethylene | Polypropylene (PE|PP)

Material Data Sheet



TÜV

HÄFNER





Rigidity



Impact strength at 23 °C at -20 °C



(Reference values for maximum working temperatures with unloaded parts.)



Abbreviation:

- **PE** = Polyethylene
- **PP** = Polypropylene

Colours:

Basic colours: anthracite, natural (milky) Other cover colours available on request.

Physical characteristics:

- **PE:** Low absorption of water, impact-resistant, nonbreakable, pliant to soft
- **PP:** higher hardness and rigidity than PE, hard to break

Texture:

semi-crystalline

Density:

PE = $0,91 - 0,96 \text{ g/ cm}^3$ **PP** = $0,89 - 0,91 \text{ g/ cm}^3$

Coefficent of thermal expansion: 15 * 1/ K * 10⁻⁵

Absorption of water:

< 0,1 %

Chemical resistance:

PE and **PP** will not be attacked by most chemicals of different types.

Environmental stress cracking:

Although a good chemical resistance exists, polyethylene parts tend to lead to environmental stress cracking under <u>simultaneous</u> influence of specific chemicals and tension.

Gluing:

A good adhesion of these parts is not possible.

All data as compiled in this data sheet is based on our suppliers data and our own experiences. The given indications and data do not constitute any guarantee for the condition and quality of the raw materials and / or the products produced from that. 04/2010