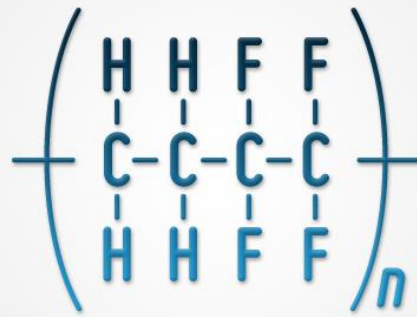


# ETFE



## **ETFE (ethylene tetrafluoroethylene)**

*ETFE is used in applications where impact resistance and good resistance to stress cracking is required.*

*This fluoropolymer compound remains these properties even during continuous working temperature of 150°C. Therefore ETFE is an excellent choice for applications in the chemical industry.*

## **Material Properties**

- Excellent impact resistance
- Excellent chemical resistance
- Good resistance to stress cracking
- Working temperature from -200°C to +150°C

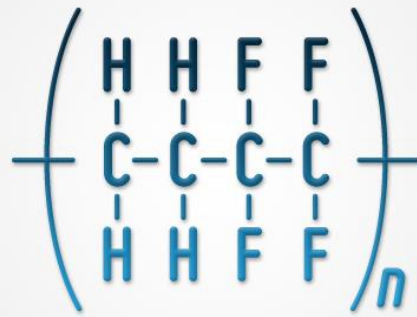
## **Possibilities**

- ETFE tubing
  - Cleanroom ETFE tubing
  - ETFE high pressure hoses
  - ETFE film/foil
  - ETFE rod
  - ETFE monofilament
  - Coating with ETFE
- etc.

## **Technical information**

Because ETFE has an excellent chemical resistance and a good resistance to stress cracking, ETFE is often used in the chemical and mechanical industry.

# ETFE



## General properties ETFE

|            | Property                      | Specification               | Unit              | Value             |
|------------|-------------------------------|-----------------------------|-------------------|-------------------|
| General    | Continuous working temp.      | Maximum                     | °C                | 150               |
|            | Chemical resistance           |                             | -                 | Excellent         |
|            | Specific gravity              | D 792                       | g/cm <sup>3</sup> | 1.73              |
| Electrical | Dielectric constant           | D 150 at 10 <sup>3</sup> Hz | -                 | 2.6               |
|            |                               | D 150 at 10 <sup>6</sup> Hz | -                 | 2.6               |
|            | Dielectric dissipation factor | D 150 at 10 <sup>3</sup> Hz | -                 | 0.0008            |
|            |                               | D 150 at 10 <sup>6</sup> Hz | -                 | 0.005             |
|            | Dielectric strength           | D 149                       | kV/mm             | 40                |
|            | Volume resistivity            | D 257                       | Ohm-cm            | >10 <sup>16</sup> |
| Mechanical | Tensile strength              | D 1708, D 638               | Mpa               | 45                |
|            | Elongation                    | D 1708, D 638               | %                 | 200               |
|            | Compressive strength          | D 695                       | Mpa               | 48                |
|            | Impact strength               | D 256 bij +23°C             | J/m               | No break          |
|            | Flexural Modulus              | D 790 bij +23°C             | Mpa               | 1380              |
|            | Tensile Modulus               | D 638                       | Mpa               | 830               |
|            | Hardness                      | D 2240                      | -                 | 63-75             |
| Thermal    | Melting (gel)point            |                             | °C                | 260               |
|            | Thermal conductivity          | +23°C                       | W/Kg.m            | 0.24              |
|            | HDT                           | DIN 75                      | °C                |                   |
|            | method A                      |                             |                   | 104               |
|            | method B                      |                             |                   | 71                |

Actual properties may change due to processing method, compound type, extruded dimensions and other variables. It is the user's responsibility to evaluate and fully test the suitability of the product for their specific application