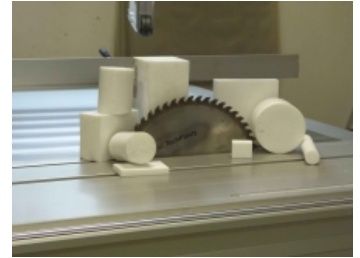


# PTFE - teflon

**Other material names PTFE:** Murflor

**Material group:** Teflon

PTFE has the lowest coefficient of all materials and is ideal in applications where lubricants are not desirable as PTFE functions without any lubricants. PTFE has the widest working temperature range of all plastics, from -260°C to 260°C. PTFE is excellent for use in cryogenic applications as shows no embrittlement. PTFE has very good sealing properties. PTFE is not flammable unless in 94% oxygen environment. PTFE is an excellent insulating material. PTFE is not ideal in high wear abrasive applications or in high loading applications. Here filled PTFE is used to improve resistance to load and wear.



## Color of material:

White



## Typical applications:

- Chemical applications, sealing applications
- Insulating materials in demanding electrical applications
- Low friction applications
- Gaskets
- Bearing pads
- Chemical equipment, valve seats, valves in gas cylinders, bellows etc.



## The material is used in:

Beverage industry  
Food industry  
Electrotechnical industry  
Automobile industry  
Chemical industry  
Packaging industry  
Dairy industry  
Meat processing industry  
Paper industry  
Glass industry  
Production of single-purpose machines

## Features:

- Chemically inert to all known industrial chemicals;
- Low co-efficient of friction, non-stick & non-toxic;
- Wide temperature range (-260°C to +260 °C);
- Exhibits excellent permeation resistance;
- Excellent dielectric properties;

**Material availability:** Some sizes are in stock

Material properties table

<b>Specific weight</b>	2.16 g/cm <sup>3</sup>
<b>Allowable mean pressure deformation 1%</b>	4.00 N/mm <sup>2</sup>
<b>p.v dry limit</b>	0.04 MPa.m/s
<b>Flexural strength</b>	6 N/mm <sup>2</sup>
<b>Tensibility</b>	350 %
<b>Flexural modulus</b>	540 N/mm <sup>2</sup>
<b>Tensile modulus</b>	700 N/mm <sup>2</sup>
<b>Impact toughness</b>	bez zlomu
<b>Notched toughness</b>	>16 kJ/m <sup>2</sup>
<b>Ball hardness</b>	55 N/mm <sup>2</sup>
<b>Friction coefficient</b>	0.06
<b>Sliding wear</b>	21.00 um/km
<b>Abrasive wear</b>	530
<b>Antistatic material</b>	No
<b>Electrical strength</b>	40 kV/mm
<b>Specific internal resistance</b>	10 <sup>18</sup> Ω
<b>Specific surface resistance</b>	10 <sup>17</sup> Ω.cm
<b>Melting point</b>	327 °C
<b>Thermal expansion</b>	15 10 <sup>-5</sup> /K
<b>Thermal conductivity</b>	0.60 W/(K.m)
<b>Permanent use temperature</b>	-200 ; 260 °C
<b>Transient temperature of use</b>	-200 ; 280 °C
<b>Absorbability</b>	0,01 %
<b>Water absorption</b>	0,01 %
<b>Resistance - oils</b>	resistant
<b>Acid resistance</b>	resistant
<b>Durability - alcali</b>	resistant
<b>Food contact</b>	Yes

Engineering plastics are supplied in the form of bars, plates, strips, tubes and sheets. From the semi-finished products the company TechPlasty has regularly in stock, we also supply blanks.

All standard and special materials are designed to meet your specific requirements. Their mechanical, thermal, and electrical properties and chemical resistance satisfy the most demanding requirements and this allows them to work even in the most difficult conditions. If you need advice when choosing the appropriate material for your application, please contact us. We'll gladly advise you. You can utilize the long-term experience of our technical advisors free-of- charge, who can visit you right in your operation and solve your requirements for engineering plastics directly at the site of their usage.

**TechPlasty, s.r.o.**

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