

# Technical Data Sheet: 60% Bronze-filled PTFE

## MATERIAL

- **PTFE + 60% Bronze**

## FEATURES & BENEFITS

### Service temperature

- **PTFE has excellent resistance** to continuous service temperatures between -150°C up to 260°C and, for short time, even to higher temperatures.
- **The addition of bronze** improves the creep resistance of PTFE and increases its thermal and electrical conductivity.

### Chemical Properties

- **PTFE has a very high inertness to most chemicals.** It is only sensitive to elemental fluorine, molten alkali metals and chlorine trifluoride at high temperature and pressures. Permeation occurs with helium, chloride and bromine.
- **The addition of bronze** decreases the chemical resistance of the product.

## TYPICAL PROPERTIES

Properties	Standard Test	Units	Typical Value
Color	Visual	NA	Metallic brown
Specific gravity	ASTM D792	g/cm <sup>3</sup>	3.8 – 4.0
Elongation at break	ASTM D4894	%	> 150
Tensile strength	ASTM D4894	MPa	> 20
Hardness	ASTM D2240	Shore D	65 - 70
Deformation under load (15MPa for 24hours at 23°C)	ASTM D621	%	5 to 7
Coefficient of linear expansion in the range 23 - 100 °C	DIN 53752	°C <sup>-1</sup>	10.10 <sup>-5</sup>
Electrical surface resistivity	ASTM D257	Ω	10 <sup>9</sup>
Electrical volume resistivity	ASTM D257	Ω.cm	10 <sup>7</sup>
Thermal conductivity	DIN 52612	W.(m.K) <sup>-1</sup>	0.7

### Important Notice:

All information set forth herein is based on our present state of knowledge and is intended to provide general notes regarding products and their uses. It should not therefore be construed as a guarantee of specific properties of the products described or their suitability for a particular application. Because conditions of product use are outside 3P's control and vary widely, user must evaluate and determine whether a 3P product will be suitable for user's intended application before using it.