

PTFE 104

Color – dark grey

PTFE 104 - material made of filled semi-finished thermoplastic based on polytetrafluoroethylene. Main filler – coke.

PTFE 104 has an exclusively wide temperature range (from -200°C up to +260°C), very low friction coefficient and high chemical resistance.

PTFE 104 has a «non-stick» surface and doesn't absorb moisture. By its fillers the time-depended deformations lower than with PTFE 101 (reduction in cold flow, increased resistance to extrusion).

Application

PTFE 104 can be used for production of U-Rings, seals, anti-extrusion back-up rings, support rings, chevron seals and guide rings. PTFE 104 mainly used in applications with high thermal and chemical stress.

This material can also be used in cases where low friction, high extrusion and deformation resistance are required, and PTFE 101 can not be used.

Main use

- Seals for low friction at high stress
- Sliding and back-up elements
- Seal parts with elastic support (elastomers, springs)

PTFE 104 Material Data Sheet

Properties	Value	Unit	Standard
Hardness	60-65	Sh D	ASTM D2240
Density	2,05 - 2,11	g/cm ³	ASTM D792
Tensile strength	15-20	N/mm ²	ISO 12086 ISO 527
Elongation at break	150-200	%	ISO 12086 ISO 527

Compressive strength at 1% deformation	4,5-6,5	N/mm ²	ASTM D695
Deformation under load at room temperature 24 hours at 13,7 N/mm ²	2,5-4	%	ASTM D621
Permanent deformation as above after 24 hours of rest at room temperature	2,5-4	%	ASTM D621
Coefficient of Linear Expansion (25°C-100°C)	12-13	10 ⁻⁵ (mm/mm)/ °C	ASTM D696
Min. service temperature	-200	°C	
Max. service temperature	+260	°C	