PTFE 15% GRAPHITE

POLYTETRAFLUORETHYLEN WITH GRAPHITE

Material description

PTFE with graphite is a compound of pure virgin PTFE with approximately 15 percent graphite by weight. This additive increases the thermal conductivity and improves the friction coefficient. The wear resistance is lower than that of PTFE with carbon additive.

Conformities

RoHS, REACH

Physical properties	Test method	Value	Unit
Density	DIN EN ISO 1183-1	2.14	g/cm3
Water absorbtion	DIN EN ISO 62	0.05	%
Sliding friction		●	
Abrasion resistance		◑	

Mechanical properties	Test method	Value	Unit
Yield stress	DIN EN ISO 527	16	MPa
Elongation at break	DIN EN ISO 527	180	%

Thermal properties	Test method	Value	Unit
Thermal conductivity	DIN 52612-2	0.75	W/(m*K)
Coefficient of thermal expansion	DIN 53752	80-130	10^{-6*K}-1
Operating temperature short term		300	°C
Operating temperature long term		260	°C
Flammability	UL 94, 3 mm	V0	

Electrical properties	Test method	Value	Unit
Volume resistivity	IEC 60093	10^7	Ω * cm
Surface resistivity	IEC 60093	10^6	Ω * cm

These technical data have been determined as average values by our suppliers from many individual measurements. In all measurements, the test specimens were tested in the dry state. We pass on the data with reservation. The table does not claim to be complete or correct. Material technology is subject to constant further development. No rights or guarantees can be derived from it. Own tests are necessary because the environmental and operating conditions (humidity, temperature, mechanical forces, radiation and chemicals, etc.) set limits in the application.

amsler & frey ag
Swiss-machined plastic parts

Amsler & Frey AG
Feldstrasse 26
5107 Schinznach-Dorf

T +41 56 463 60 70
info@amsler-frey.ch