

Technical films

Tecfilm[®] PTFE TC 00441

Description: The glass additive for Tecfilm[®] PTFE TC 00441 makes the material more rigid and harder, reduces the tensile and impact strength. The additive also enhances the creep resistance, dimensional stability and wear characteristics.

Applications: Tecfilm[®] PTFE TC 00441 can be used as a center wear pad, piston ring and rotary disc in microwaves.

Delivery forms: Tecfilm[®] PTFE TC 00441 can be delivered on a roll or as tape, customized cut or die-cut part as well as self-adhesive. Other delivery forms upon customer request.

Trademark information: Tecfilm[®] is a registered trademark of the company Dr. Dietrich Müller GmbH, Germany.

Please note: The information in this data sheet is based on our current knowledge and experience. They do not disengage the fabricator and the user from own tests and inspections because of the plenty of possible effects. There is no judicial binding assurance of certain properties or of the qualification for a concrete application in our declaration. We recommend consulting us in individual cases. The acceptor of our products has to observe possible industrial property rights as well as present laws by himself.

Dr. Dietrich Müller GmbH

Tecfilm® PTFE TC 00441

properties	Unit	Value
Density	g cm ⁻³	2,25
Flammability		V0
Min. oxygen content	%	95
Waterabsorption – over 24 h	%	0,15
UV-light resistance		Good
Resolution factor at 1 kHz		0,003
Dielectric strength	kV mm ⁻¹	40
Dielectric constant at 1 MHz		2,2 – 2,35
Spec. surface resistance	Ohm/sq	10 ¹⁵
Spec. volume resistance	Ohmcm	10 ¹⁶
Linear coefficient of thermal expansion	x 10 ⁻⁶ K ⁻¹	75 – 100
Max. long-term service temperature	°C	260
Specific heat	J K ⁻¹ kg ⁻¹	1000
Thermal conductivity at 23°C	W m ⁻¹ K ⁻¹	0,25
Tensile modulus	GPa	1,7
Hardness – Rockwell	Shore	D60 – 70
Notch impact strength acc. to Izod	J m ⁻¹	144
Poisson-ratio		0,08 – 0,10
Coefficient of friction	%	100 – 300
Elongation at break	%	400
Tensile strength	MPa	7 – 20
Alcohols		Good
Aromatic hydrocarbons		Good
Greases and oils		Good
Halogens		Good
Halogenehydrocarbons		Good
Ketones		Good
Lyes		Good – mediocre
Acids – concentrated		Poor
Acids - diluted		Good

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