

Technical Films

Tecfilm® PTFE TC 00440

Description:

Tecfilm® PTFE TC 00440 is a fully fluorinated polymer, semi-crystalline, almost opaque and white. The material has a very high chemical resistance as well as excellent temperature resistance. Tecfilm® PTFE TC 00440 has excellent non-stick and anti-slip properties.

Application:

Bearings, seals, O-rings, high-temperature electrical insulation, non-stick coatings and linings for containers. Its technical properties make Tecfilm® PTFE TC 00440 an indispensable part of laboratory applications.

Feature	Test Method	Value	Unit
Density	ISO 1183	2,14 - 2,19	g/cm ³
Upper use temperature	-	250 - 260	°C
Flammability	-	Non-flammable	-
Water absorption at 23°C	-	<0.05	%
Melting temperature	ASTM 2116	327	°C
Coefficient of Thermal Expansion	DIN 52612	10 - 16	10 ⁻⁵ *K ⁻¹
Thermal conductivity at 23 °C	-	0,23	W/K*m
Specific heat at 23°C	-	1,01	kJ/kg*K
Oxygen Index	-	>95	%

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Feature	Test Method	Value	Unit
Tear resistance at 23 °C	ISO 527	29 - 39	N/mm ²
Tear resistance at 150 °C	ISO 527	14 - 20	N/mm ²
Yield strength at 23 °C	ISO 527	10	N/mm ²
Elongation at 23 °C	ISO 527	200 - 500	%
Tensile modulus at 23 °C	ISO 527	400 - 800	N/mm ²
Limit bending stress at 23 °C	ISO 178	18 - 20	N/mm ²
Bending modulus of elasticity at 23 °C	ISO 527	600 - 800	N/mm ²
Ball pressure hardness at 23 °C	ISO 2039	25 - 30	-
Rockwell hardness R	ISO 2039	20 - 30	-
Shore hardness D	DIN 53505	55 - 72	-
Coefficient of friction	-	0,05 - 0,2	-
Dielectric number at 100Hz	IEC 60250	<2.1	-
Dielectric number at 10 ⁶	IEC 60250	<2.1	-
Dielectric Dissipation Factor at 100Hz	-	0,5 - 0,7	Oh
Contact Resistance	DIN 53482	1018	Ω.cm
Surface Resistance	DIN 53482	1017	Oh
Tracking resistance	IEC 60112	KA3	-
Dielectric strength	IEC 60243-2	>40	KV/mm
CTI value	-	600	-
UL Number	-	E536667	-

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Brand Information: Brand name® is a registered trademark of Dr. Dietrich Müller GmbH, Germany.

Please note: The information in this technical data sheet is based on our current knowledge and experience. They do not exempt the processor and user from their own tests and tests due to the abundance of possible influences during use. A legally binding assurance of certain properties or suitability for a specific application cannot be derived from our information. Depending on the individual case, we recommend consulting with us. Any intellectual property rights and existing laws must be observed by the recipient of our products on his or her own responsibility.
