Technical datasheet

PVDF (Polyvinylflouride)

Example of application
› valve stem; pump components

Advantages	Disadvantages
› excellent chemical resistance › very low water absorption › good UV-resistance	› high thermal expansion

Basic information	Specification
Format	**round material:** 10 mm up to 125 mm available in 3 m length 140 mm up to 250 mm available in 1 m **sheets:** 6 mm up to 10 mm available in 2 m x 1 m

Physical properties	Standard term/Specification*	Unit	Testing method
Density	1.78	g/cm^3	ISO 1183
Moisture ingress	0.04	%	DIN EN ISO 62

Mechanical properties	Standard term/Specification*	Unit	Testing method
Tensile strength	46	MPa	DIN EN ISO 527
Elongation at break	29	%	DIN EN ISO 527
E-Module	2.125	MPa	DIN EN ISO 527
Notch toughness	12	kJ/m^2	ISO 179
Rochwellhardness	120	MPa	DIN EN ISO 2039

Thermal properties	Standard term/Specification*	Unit	Testing method
Thermal conductivity	0.13	W/(m·K)	DIN 52612
Linear thermal expansion coefficient based on a fixed initial length	1.3	$K^{-1} \cdot 10^{-4}$	DIN 53752
	2.6	mm	At initial length of 1.000 mm and a temperature difference of 20 °C.
Max. operating temperature, long-term	150	°C	
Max. operating temperature, short-term	n.sp.	°C	
Min. operating temperature, long-term	-30	°C	

Electrical properties	Standard term/Specification*	Unit	Testing method
Resistance	10^{10}	Ω·cm	DIN IEC 60093
Outer surface coefficient	10^{13}	Ω	DIN IEC 60093
Puncture resistance	27	kV/mm	DIN EN 60243

Legend
n.sp. = not specified

Should you require binding and exact values, please ask for the appropriate factory certificate. This may incur additional costs. Please note that all specifications are standard values only, which are subject to production-related fluctuations.
*Higher specification on request.

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technical plastics

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