

CPVC Technical Data Sheet

Technical Data	Method of Verification	Unit	CPVC
Physical Properties			
Density	ISO 1183	g/cm ³	1.55
Water absorption	ISO 62	%	0.2
Mechanical Properties			
Tensile strength at yield	ISO 527-2	MPa	57
Tensile strength at break	ISO 527-2	Mpa	80
Elongation at break	ISO 527-2	%	15
Modulus of elasticity after tensile	ISO 527-2	MPa	
Modulus of elasticity after flexural	ISO 178	MPa	
Hardness-Rockwell	ISO 2039-2		-
Hardness - Shore D	DIN 53505		90
Charpy impact strength at 23°C	ISO 179	kJ/m ²	
Friction coefficient	DIN 53375		0.6
Thermal Properties			
Heat deflection temperature - HDT/A	ISO 75-2	°C	-
Max. service temperature - Short		°C	95
Max. service temperature - Long		°C	90
Thermal conductivity at 23 °C	DIN 11359	W/(K*m)	0.14
Coefficient of linear thermal	ISO 11359	10 ⁻⁴ K ⁻¹	0.6
Electrical Properties			
Dielectric constant at 1 MHz	IEC 60250	10 ⁶ Hz	3.00
Dielectric loss factor at 1 MHz	IEC 60250	10 ⁶ Hz	0.01
Volume resistivity	IEC 60093	Ohm (Ω) * cm	≥10 ¹⁵
Surface resistivity	IEC 60093	Ohm (Ω)	≥10 ¹³
Dielectric strength	IEC 60243-1	kV/mm	20-40
Miscellaneous Data			
Flammability	UL 94	Class	V-0
Chemical Properties			
Acid resistance			yes
Hydroxid resistance(delute)			yes
Hydrocarbonat resistance			yes
CKW resistance			no
Aromatic resistance			limited
Ketone resistance			no
Resistance against hot water			limited
NOTE: 1 g/cm³ = 1,000 kg/m³, 1 Mpa = 1 N/mm², 1kV/mm = 1 MV/m			

Statement:

The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Energetic will not provide any legally binding guarantee of certain properties, or any suitability.