

Technical Data - Overview

Typical bulk properties for clear films unless otherwise noted

Property	Test Method	Units	Value
Physical			
Specific Gravity	ASTM D-792	g / cm ³	1,32
Water Absorption at 24 hours	ASTM D-570	%	0,28
Optical			
Refractive Index @ 25 °C	ASTM D-542	ND	1,60
Light Transmission ¹	ASTM D-1003	%	89
Yellowness Index ¹	ASTM D-1925	---	< 1
Mechanical			
Tensile Strength, Break ¹	ASTM D-882	MPa	60
Tensile Strength, Yield ¹	ASTM D-882	MPa	70
Tensile Elongation, Break ¹	ASTM D-882	%	130
Tensile Modulus of Elasticity ¹	ASTM D-882	MPa	2.200
Tear Strength, Initial ¹	ASTM D-1004	N / μm	0,3
Tear Strength, Propagation ¹	ASTM D-1922	g / μm	2
Impact Strength, Gardner ²	ASTM D-5420	J	28
Thermal			
Deflection Temperature under Flexural Load @ 1,8 MPa	ASTM D-648	°C	142
Specific Heat Capacity @ 25 °C	ASTM E-1269	J / g / °C	1,26
Thermal Conductivity	ASTM D-5470	W / m °C	0,20
Coefficient of Thermal Expansion	ASTM E-831	cm / cm / °C	5.8 x 10 ⁻⁵
Glass Transition Temperature	ASTM D-3418	°C	152
Brittleness Temperature	ASTM D-746	°C	-135
Vicat Softening Temperature	ASTM D-1525	°C	152
Electrical			
Dielectric Strength @ 22°C in oil, short time ¹	ASTM D-149	kV / cm	590
Dielectric Constant @ 60 Hz / 1MHz	ASTM D-150	---	2,9 / 2,8
Dissipation Factor @ 60 Hz / 1MHz	ASTM D-150	---	0,0026 / 1,17
Volume Resistivity	ASTM D-257	Ω-cm	10 ¹⁷
Surface Resistivity	ASTM D-257	Ω-cm ²	10 ¹⁵
Arc Resistance, Tungsten Electrodes	ASTM D-495	sec	62
Flammability			
RowTec® V			
Flammability Classification (Clear 125 - 250 μm)	UL 94	---	VTM-2
RowTec® FR			
Flammability Classification (Clear 75 - 100 μm)	UL 94	---	VTM-0
Flammability Classification (Clear 125 - 762 μm)	UL 94	---	V-0
Flammability Classification (Black 410 - 610 μm)	UL 94	---	V-0