

Polyester (PET) film

Monolayer film

Properties

- Tough, versatile, without plasticizers, archival quality.
- Dimensionally stable.
- Chemical resistant color consistent, good clarity, non-yellowing.
- Temperature range from -70°C to +150°C.
- Non-tearing, does not become brittle with age under normal conditions.
- Electrically insulating.
- Balanced tensile properties.
- Excellent moisture resistance (not-wettable).



Applications

- Class B (130°C) electric motors systems.
- Slot insulation, phase insulation and wedges for motors and generators.
- Core, interlayer and final insulation for transformers chokes and relays.
- Wide range of uses such as packaging, printing, electronics, protective overlay, barrier protection, apparel and many industrial applications.
- Equipment as apparel stays, book jackets, carbon ribbons, control tapes, drumheads, identifications membrane touch switches & others.

TECHNICAL DATA	UNIT	TEST METHOD													
Total thickness	µm		19	23	36	50	75	100	125	190	250	300	350	500	
Physical & mechanical properties															
Specific weight	g/m ²		27	32	50	70	105	140	175	265	350	418	480	670	
Weight	m ² /kg		38	31	20	14	9.6	7.2	5.7	3.8	2.9	2.4	2.0	1.5	
Tensile strength longitudinal	N/mm ²	ASTM D 882	210	210	230	190	190	190	180	190	190	190	190	150	
Tensile strength transversal	N/mm ²	ASTM D 882	230	230	260	210	200	200	200	220	200	200	190	170	
Elongation at break longitudinal	%	ASTM D 882	110	130	130	140	140	150	150	190	210	210	240	270	
Elongation at break transversal	%	ASTM D 882	110	110	110	120	120	120	130	140	170	180	200	240	
Shrinkage longitudinal (30 min at 150°C)	%	ASTM D 1204	1.3	1.3	2	1.2	1.1	1.1	1.1	1.3	1.3	1.3	1.3	0.9	
Shrinkage transversal (30 min at 150°C)	%	ASTM D 1204	1	1	1.7	1.1	1	1	1	1.3	1.3	1.3	1.3	0.9	
Shrinkage longitudinal (30 min at 200°C)	%	ASTM D 1204	4	4	7	2.8	2.5	2.5	2.5	3.5	3.5	3.5	3.5	2.0	
Shrinkage transversal (30 min at 200°C)	%	ASTM D 1204	3	3	6.5	2.5	2.3	2.3	2.3	3.5	3.5	3.5	3.5	1.7	
Electrical															
Dielectric strength	kV	ASTM D 149	3	4	5	8	10	12	13	17.5	19	19	20	20	
Dielectric constant (AC 50 Hz, 25°C)	-	ASTM D 150	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
Dielectric loss factor (AC 50 Hz, 25°C)	-	ASTM D 150	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	
Specific volume resistance (25°C)	Ω/m	ASTM D 257 / D 2305	10 ¹⁸	10 ¹⁸	10 ¹⁸	10 ¹⁸	10 ¹⁸	10 ¹⁸	10 ¹⁸	10 ¹⁸	10 ¹⁸	10 ¹⁸	10 ¹⁸	10 ¹⁸	
Specific surface resistance	Ω/m	23°C 30% r.F	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	
	Ω/m	23°C 80% r.F	10 ¹²	10 ¹²	10 ¹²	10 ¹²	10 ¹²	10 ¹²	10 ¹²	10 ¹²	10 ¹²	10 ¹²	10 ¹²	10 ¹²	
CTI	-	acc. to UL	1	1	1	1	1	1	1	1	1	1	1	1	
Thermal															
Thermal class	°C	-	150												
Flammability	-	UL94	VTM-2												V-2
Resistance															
Mineral oil	-	-	Resistant												
Water	-	-	Resistant												