Ajedium™ Films -- Udel® PSU P-1700 NT-11

Polysulfone

Solvay Specialty Polymers

Message:

Udel® P-1700 polysulfones are tough, high-strength thermoplastics that are suitable for continuous use up to 300°F (149°C).
Udel Film is resistant to oxidation and hydrolysis and withstand prolonged exposure to high temperatures and repeated sterilization. Udel® P-1700 polysulfone films are highly resistant to mineral acids, alkali and salt solutions. Their resistance to detergents and hydrocarbon oils is good, but they will be attacked by polar solvents such as ketones, chlorinated hydrocarbons, and aromatic hydrocarbons.
Electrical properties of Udel® PSU films are stable over a wide temperature range and after immersion in water or exposure to high humidity.
The film is transparent, a light yellow color.

General Information	
Features	Electron beam disinfection
	High strength
	Good disinfection
	Anti-gamma radiation
	Antioxidation
	alkali resistance
	Heat resistance, high
	Hydrolysis resistance
	acid resistance
	Good toughness
	Compliance of Food Exposure
Uses	Battery
	Electrical/Electronic Applications
	Electrical components
	Home appliance components
	Automotive Electronics
	Food service sector
Agency Ratings	FDA 21 CFR 177.1655
	NSF Not Rated
RoHS Compliance	RoHS compliance
Appearance	Amber
	Natural color

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.24	g/cm³	ASTM D792
Water Absorption (24 hr)	0.30	%	ASTM D570

Mechanical	Nominal Value	Unit	Test Method

Tear Resistance	945	J/cm	ASTM D1004
Area coefficient	158	ft^2/lb/mil	
Films	**Nominal Value**	**Unit**	**Test Method**
Film Thickness - Tested	30	µm	
secant modulus			ASTM D882
MD	2300	MPa	ASTM D882
TD	2370	MPa	ASTM D882
Tensile Strength			ASTM D882
MD: Yield	68.0	MPa	ASTM D882
TD: Yield	63.7	MPa	ASTM D882
MD: Fracture	58.3	MPa	ASTM D882
TD: Fracture	56.8	MPa	ASTM D882
Tensile Elongation			ASTM D882
MD: Yield	5.5	%	ASTM D882
TD: Yield	5.1	%	ASTM D882
MD: Fracture	53	%	ASTM D882
TD: Fracture	35	%	ASTM D882
Dart Drop Impact	400	g	ASTM D1709
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (1.8 MPa, Unannealed)	174	°C	ASTM D648
CLTE - Flow	5.6E-5	cm/cm/°C	ASTM D696
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	3.0E+16	ohms·cm	ASTM D257
Dielectric Strength	130	kV/mm	ASTM D149
Dielectric Constant (1 kHz)	3.04		ASTM D150
Dissipation Factor (1 MHz)	6.0E-3		ASTM D150
Flammability	**Nominal Value**	**Unit**	**Test Method**
Oxygen Index	26	%	ASTM D2863
Additional Information			

Standard Thicknesses and Widths
Widths are available from 22" (559 mm) to 56" (1422 mm).
Products with widths 56 inches are available upon request.
Tolerances for widths are +/- 4mm.
For PSU film, the standard thicknesses are 25 microns (1 mil) to 1016 microns (40 mil).
Surface Finishes
Standard surface finish is P/M (polished / matte).
Custom finishes of P/P (polished / polished) and M/M (matte / matte) are available.
Packaging
Film is supplied in a roll form of high quality, cardboard core of 3" (76mm) or 6" (152mm).
PVC cores are available upon request in 3" and 6" sizes.
Labeling
Products are labeled to comply with national and international standards.
Labels include product grade, unique batch number, roll length, roll width, product thickness, and net weight.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

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Phone: +86 13424755533

Email: sales@su-jiao.com

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