Udel® P-3500 LCD

Polysulfone

Solvay Specialty Polymers

Message:

Udel P-3500 LCD is a polysulfone with extremely high molecular weight and has the highest toughness and chemical resistance among the existing available grades. Very suitable for extrusion molding.
The advantage of Udel P-3500 LCD comes from its lower level of cyclic dimer polymer.
Polysulfone is a high-strength thermoplastic with high toughness, high rigidity and transparency, suitable for long-term use at temperatures up to 300 ° F(149 ° C). Anti-oxidation, anti-hydrolysis, can be exposed to high temperature for a long time, and can be repeatedly sterilized.
Polysulfone is resistant to inorganic acids, alkalis, salt solutions, detergents and hydrocarbons. Contact with polar solvents such as ketones, chlorinated hydrocarbons and aromatic hydrocarbons should be avoided, as these types of compounds are prone to stress cracking or dissolution of polysulfone resins.
Polysulfone can withstand gamma ray or electron beam radiation degradation well, but long-term exposure to ultraviolet rays will be adversely affected. It has stable electrical properties over a wide temperature range, after being soaked in water or exposed to high humidity. The resin is very safe in contact with food. Comply with FDA 21 CFR 177 and 1655 standards, and can be used for reusable items in contact with food. In addition, it meets NSF, USDA meat and poultry exposure, and Dairy Association 3 -A hygiene standards. -transparent: Udel P-3500 NT LCD

General Information	
Features	Good dimensional stability
	Good disinfection
	Good chemical resistance
	alkali resistance
	Alcohol resistance
	Heat resistance, high
	acid resistance
	Hydrocarbon resistance
	Detergent resistance
	Good toughness
	Hydrolysis stability
	Disinfect with steam
	Excellent appearance
Uses	Membrane
Agency Ratings	FDA 21 CFR 177.1655
	NSF 61 2
RoHS Compliance	RoHS compliance
Appearance	Natural color
Forms	Particle
Processing Method	Film extrusion
	Pipeline extrusion molding
	Machining
	Extrusion
	Extrusion blow molding

Sheet extrusion molding

Thermoforming

Profile extrusion molding

Injection blowing molding

Injection molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.24	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (343°C/2.16 kg)	3.0 - 5.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.70	%	ASTM D955
Water Absorption (24 hr)	0.30	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	2480	MPa	ASTM D638
Tensile Strength (Break)	70.3	MPa	ASTM D638
Tensile Elongation (Break)	50 - 100	%	ASTM D638
Flexural Modulus	2690	MPa	ASTM D790
Flexural Strength	106	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	69	J/m	ASTM D256
Tensile Impact Strength	420	kJ/m²	ASTM D1822
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	17	kV/mm	ASTM D149
Dielectric Constant			ASTM D150
60 Hz	3.03		ASTM D150
1 kHz	3.04		ASTM D150
1 MHz	3.02		ASTM D150
Dissipation Factor			ASTM D150
60 Hz	7.0E-3		ASTM D150
1 kHz	1.0E-3		ASTM D150
1 MHz	6.0E-3		ASTM D150

Injection instructions

在准备加工方案前,可以采用循环热空气炉干燥UDEL P- 3500聚砜粒子.塑料粒子摊开在托盘上,形成1~2英寸的厚度,在257~325 °F (135 ～163°C)温度条件下,干燥3.5小时 .

Extrusion	Nominal Value	Unit
Drying Temperature	135 - 163	°C
Drying Time	3.5	hr
Cylinder Zone 1 Temp.	302	°C

Cylinder Zone 5 Temp.	316 - 338	°C
Melt Temperature	316 - 371	°C

Recommended distributors for this material

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