Tenite™ Propionate 307E4000018 Clear, Trsp

Cellulose Acetate Propionate

Eastman Chemical Company

Message:

Tenite™ cellulosic plastics are noted for their excellent balance of properties - toughness, hardness, strength, surface gloss, clarity, and a warm feel. The mechanical properties if Tenite™ cellulosic plastics differ with plasticizer levels. Lower plasticizer content yields a harder surface, higher heat resistance, greater rigidity, higher tensile strength, and better dimensional stability. Higher plasticizer content increases impact strength. Tenite™ cellulosic plastics are available in natural, clear, selected ambers or smoke transparents and black translucent. Color concentrates are available in let-down ratios from 10:1 to 40:1. Tenite™ Cellulosic Acetate Propionate 307-18 has a plasticizer level of 18%.

General Information			
Additive	Plasticizer (18%)		
Features	Good Strength Good Toughness High Clarity High Gloss High Hardness Plasticized Renewable Resource Content Soft		
Uses	Eyeglasses		
Appearance	Amber Black Clear/Transparent Natural Color		
Forms	Pellets		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.19	g/cm³	ASTM D792
Molding Shrinkage - Flow	0.20 to 0.60	%	ASTM D955
Water Absorption (23°C, 24 hr)	1.4	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale, 23°C)	55		ASTM D785
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength			ASTM D638
Yield, 23°C	22.1	MPa	
Break, 23°C	27.6	MPa	
Tensile Elongation (Break, 23°C)	35	%	ASTM D638
Flexural Modulus (23°C)	1170	MPa	ASTM D790
Flexural Strength (Yield, 23°C)	29.0	MPa	ASTM D790

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-40°C	110	J/m	
23°C	520	J/m	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load [1]			ASTM D648
0.45 MPa, Annealed	77.0	°C	
1.8 MPa, Annealed	67.0	°C	
Vicat Softening Temperature [2]	87.0	°C	ASTM D1525
CLTE - Flow (23°C)	2.0E-5	cm/cm/°C	ASTM D696
Specific Heat (23°C)	1260 to 1670	J/kg/°C	DSC
Thermal Conductivity [3] (23°C)	0.25	W/m/K	ASTM C177
Electrical	**Nominal Value**	**Unit**	**Test Method**
Dielectric Strength (23°C)	12 to 19	kV/mm	ASTM D149
Dielectric Constant (23°C, 1 MHz)	3.30 to 3.80		ASTM D150
Dissipation Factor (23°C, 1 MHz)	0.010 to 0.15		ASTM D150
Optical	**Nominal Value**	**Unit**	**Test Method**
Refractive Index	1.460 to 1.490		ASTM D542
Transmittance (1520 µm)	> 90.0	%	ASTM D1003
Haze (1520 µm)	< 8.5	%	ASTM D1003
Additional Information	**Nominal Value**	**Unit**	**Test Method**
Soluble Matter Loss (23°C)	0.10	%	ASTM D570
Weight Loss on Heating - 72 hrs (80°C)	1.0	%	ASTM D1562
NOTE			
1.	Conditioned 4 hours at 70°C (158°F)		
2.	Conditioned 4 hours at 70°C (158°F)		
3.	Range: 0.17 to 0.33		

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China


WECHAT