Tenite[™] Butyrate 550E4861316 Clear, Trsp

Cellulose Acetate Butyrate

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 of 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 translucents. Color concentrates are available in let-down ratios from 10:1 to 40:1. Tenite[™] Cellulose Acetate Butyrate 550-16 contains an odor mask and has a plasticizer level of 16%. It meets FDA requirements when supplied in FDA color numbers.

General Information						
Additive	Plasticizer (16%)	Plasticizer (16%)				
Features	Food Contact Acceptable					
	Good Strength					
	Good Toughness					
	High Clarity					
	High Gloss					
	High Hardness					
	Low to No Odor					
	Plasticized					
	Renewable Resource Content					
	Soft					
Uses	Profiles					
Agency Ratings	FDA Food Contact, Unspecified Rating					
Appearance	Amber					
	Black					
	Clear/Transparent					
	Natural Color					
Forms	Pellets					
Physical	Nominal Value	Unit	Test Method			
Specific Gravity	1.17	g/cm³	ASTM D792			
Molding Shrinkage - Flow	0.20 to 0.60	%	ASTM D955			
Water Absorption (23°C, 24 hr)	1.3	%	ASTM D570			
Hardness	Nominal Value	Unit	Test Method			
Rockwell Hardness (R-Scale, 23°C)	40		ASTM D785			
Mechanical	Nominal Value	Unit	Test Method			
Tensile Strength			ASTM D638			
Yield, 23°C	25.5	MPa				
Break, 23°C	33.8	MPa				

Tensile Elongation (Break, 23°C)	50	%	ASTM D638
Flexural Modulus (23°C)	1100	MPa	ASTM D790
Flexural Strength (Yield, 23°C)	33.1	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-40°C	110	J/m	
23°C	330	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	64.0	°C	
Vicat Softening Temperature ²	96.0	°C	ASTM D1525
CLTE - Flow (23°C)	1.1E-6	cm/cm/°C	ASTM D696
Specific Heat (23°C)	1260 to 1670	J/kg/°C	DSC
Thermal Conductivity (23°C)	0.17 to 0.33	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)	0.80	%	ASTM D707
NOTE			
1.	Conditioned 4 hours at 70°C (158°F)		
2.	Conditioned 4 hours at 70°C (158°F)		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

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

