

## Eastman Tenite Propionate 376E400012 Clear, Trsp Cellulose Acetate Propionate

Category : Polymer , Renewable/Recycled Polymer , Thermoplastic , Cellulosic , Cellulose Acetate Propionate, Molded

### Material Notes:

Plasticizer 12%. Weight loss on heating = 0.4% per ASTM D 707. Soluble matter loss = 0.1% per ASTM D 570. Product Description: 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 translucent. Color concentrates are available in let-down ratios from 10:1 to 40:1. TENITE Cellulose Acetate Propionate 376-12 contains an ultra-violet inhibitor and has a plasticizer level of 12%. Applications: Housewares; Ophthalmic; Toys/Sporting goods Technical Data Sheet Characteristics: Formula 376 - UVI; standard inventory. Available in 12% plasticizer only. Comments: Properties reported here are typical of average lots. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given. Information provided by Eastman Chemical.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Eastman-Tenite-Propionate-376E400012-Clear-Trsp-Cellulose-Acetate-Propionate.php](http://www.lookpolymers.com/polymer_Eastman-Tenite-Propionate-376E400012-Clear-Trsp-Cellulose-Acetate-Propionate.php)

Physical Properties	Metric	English	Comments
Density	1.20 g/cc	0.0434 lb/in <sup>3</sup>	ASTM D792
Water Absorption	1.5 %	1.5 %	24 hour immersion; ASTM D570
Linear Mold Shrinkage	0.0040 cm/cm	0.0040 in/in	ASTM D955

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	78	78	ASTM D785
Tensile Strength, Ultimate	33.1 MPa	4800 psi	ASTM D638
Tensile Strength, Yield	31.7 MPa	4600 psi	ASTM D638
Elongation at Break	45 %	45 %	ASTM D638
Flexural Yield Strength	41.4 MPa	6000 psi	ASTM D790
Flexural Modulus	1.448 GPa	210.0 ksi	ASTM D790
Izod Impact, Notched	4.16 J/cm	7.79 ft-lb/in	ASTM D256
	1.07 J/cm	2.00 ft-lb/in	ASTM D256
	@Temperature -40.0 °C	@Temperature -40.0 °F	

Thermal Properties	Metric	English	Comments
--------------------	--------	---------	----------

Thermal Properties	Metric	English	Comments
<small>CTE, linear</small>	11.0 - 17.0 $\mu\text{m}/\text{m}\cdot\text{°C}$	6.11 - 9.44 $\mu\text{in}/\text{in}\cdot\text{°F}$	ASTM D336
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Specific Heat Capacity	1.465 J/g-°C	0.3501 BTU/lb-°F	DSC
Thermal Conductivity	0.250 W/m-K	1.74 BTU-in/hr-ft <sup>2</sup> -°F	ASTM C177
Deflection Temperature at 0.46 MPa (66 psi)	83.0 °C	181 °F	ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	75.0 °C	167 °F	Conditioned 4 hours @ 70°C (158°F); ASTM D648
Vicat Softening Point	96.0 °C	205 °F	Conditioned 4 hours @ 70°C (158°F); ASTM D1525

Optical Properties	Metric	English	Comments
Refractive Index	1.475	1.475	ASTM D542
Haze	<= 8.5 %	<= 8.5 %	ASTM D1003
	@Thickness 1.52 mm	@Thickness 0.0598 in	
Transmission, Visible	>= 90 %	>= 90 %	ASTM E308
	@Thickness 1.52 mm	@Thickness 0.0598 in	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	1.00e+13 - 1.00e+15 ohm-cm	1.00e+13 - 1.00e+15 ohm-cm	ASTM D257
Dielectric Constant	3.55	3.55	ASTM D 150
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Dielectric Strength	15.25 kV/mm	387.4 kV/in	ASTM D149
Dissipation Factor	0.080	0.080	ASTM D150
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China