Tenite™ Acetate 105E1R26029 Clear, Trsp

Cellulose Acetate

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, amber, and black. Color concentrates are available in let-down ratios from 10:1 to 40:1. Tenite™ Cellulose Acetate 105-29 is heat stabilized and has a plasticizer level of 29%.

General Information	
Additive	Heat Stabilizer
	Plasticizer (29%)
Features	Good Strength
	Good Toughness
	Heat Stabilized
	High Gloss
	High Hardness
	Plasticized
	Renewable Resource Content
	Soft
Uses	Cosmetics
	Eyeglasses
	Handles
	Sporting Goods
	Toys
Appearance	Amber
	Black
	Clear/Transparent
	Natural Color
Forms	Pellets

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.27	g/cm³	ASTM D792
Molding Shrinkage - Flow	0.20 to 0.60	%	ASTM D955
Water Absorption (23°C, 24 hr)	2.3	%	ASTM D570

Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 23°C)	71		ASTM D785

Mechanical	Nominal Value	Unit	Test Method
Tensile Strength			ASTM D638
Yield, 23°C	29.6	MPa	
Break, 23°C	33.1	MPa	
Tensile Elongation (Break, 23°C)	30	%	ASTM D638
Flexural Modulus (23°C)	1930	MPa	ASTM D790
Flexural Strength (Yield, 23°C)	46.9	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact			ASTM D256
-40°C	53	J/m	
23°C	200	J/m	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load [1]			ASTM D648
0.45 MPa, Annealed	79.0	°C	
1.8 MPa, Annealed	68.0	°C	
Vicat Softening Temperature [2]	105	°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 E308
Haze (1520 µm)	< 8.5	%	ASTM D1003
Additional Information	**Nominal Value**	**Unit**	**Test Method**
Soluble Matter Loss (23°C)	0.40	%	ASTM D570
Weight Loss on Heating - 72 hrs (80°C)	2.6	%	ASTM D706
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