Tenite[™] Butyrate 285A2R30010 Natural, 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[™] cellulose 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 285-10 has a plasticizer level of 10% and contains an odor mask.

Features Good Strength Good Toughness High Clarity High Clarity High Gloss High Gloss High Hardness Plasticized Renewable Resource Content Soft Soft Uses Handles Medical/Healthcare Applications Soft Appearance Amber Black Clear/Transparent Natural Color Sectional Strington Method Forms Pellets Physical Norninal Value Unit Molding Shrinkage - Flow 0.20 to 0.60 % Natural Color Sinth D792 Molding Shrinkage - Flow 0.20 to 0.60 % Molding Shrinkage - Flow 0.20 to 0.60 % Mater Absorption (23*C, 24 hr) 1.4 % Reckeneel Hardness Norninal Value Unit Test Method Rockeneel Hardness (R-Scale, 23*C) 78 ASTM D78 Mechanical Nornial Value Unit Test Method Rockardington 78 ASTM D78 Molding Shrinkage - Flow ASTM D78 Moldens (R-Scale, 23*C) <	General Information					
Good Toughness High Clarity High Boloss High Hardness Plasticized Renewable Resource Content SoftSubstance SoftUsesHandles Hedica/Healthcare ApplicationsSubstance SoftAppearanceAmber Black Clear/Transparent Natural ColorSubstanceFormsPelletsSubstancePhysicalNominal ValueUnitTest MethodMolding Shrinkage - Flow1.9% 0.000% 3000 \$570Moiding Shrinkage - Flow1.9% 0.000% 3000 \$570Mater Absorption (25°C 24'r)1.4% 0.000% 3000 \$570HardnessNominal ValueUnitTest MethodReck Specificavity1.4% 0.000% 3000 \$570Mater Absorption (25°C 24'r)1.4% 0.000% 3000 \$570Mater Absorption (25°C 24'r)78KathodMaterReckwell Hardness (R-Scale, 23°C)78Kathod\$570 \$570Yield, 23°C3.1MPaKathodFrank 23°C43.4MPaKathod	Additive	Plasticizer (10%)				
High Clarity High Gless High Hardness Plasticized Renewable Resource Content SoftSoftUsesHandles Medical/Healthcare ApplicationsSoftAppearanceAmber Black Clear/Transparent Clear/TransparentSoftPhysicalNominal ValueUnitTest MethodSpecific Gravity1.19g/cm²ASTM D792Molding Shrinkage - Flow0.20 to 0.60%ASTM D792Modifue Shrinkage - Flow1.9g/cm²ASTM D792Modifue Shrinkage - Flow0.20 to 0.60%ASTM D792Moder Absorption (23°C, 24 hr)1.4%ASTM D792Nennal ValueUnitTest MethodRockwell Hardness (R-Scale, 23°C)7STM D785Medical StrinkageNominal ValueUnitTest MethodRockwell Hardness (R-Scale, 23°C)33.1MPaYield, 23°C33.1MPa	Features	Good Strength				
High Gloss High Hardness Plasticized Renevable Resource Content SoftUsesHandles Medical/Healthcare ApplicationsAppearanceAmber Black Clear/Transparent Natural ColorFormsPellesPhysicalNominal ValueMoling Shrinkage - Flow0.20 to 0.60Valer Absorption (23°C, 24 hr)1.41.19g/cm ³ Moling Shrinkage - Flow1.4Natural ColorSpecific Gravity1.4Moling Shrinkage - Flow20 to 0.60Moling Shrinkage - Flow1.4Moninal ValueMolinal Catter Catt		Good Toughness				
High Hardness Plastcized Renewable Resource Content SoftUsesHandles Medical/Healthcare ApplicationsAppearanceAmber Black Clear/Transparent Natural ColorFormsPelletsPhysicalNominal ValueMoling Shrinkage - Flow0.20 to 0.60Molard Shrinkage - Flow0.20 to 0.60Molard Shrinkage - Flow1.4Mominal ValueUnitTest MethodReckwell Hardness (R-Scale, 23°C)78Rockwell Hardness (R-Scale, 23°C)78Yield, 23°C33.1MeaASTM D785Frenk, 23°C33.1MeaManaFrenk, 23°C33.1MeaMeaFrenk, 23°C33.1MeaMeaFrenk, 23°C43.4MeaMeaFrenk, 23°C43.4		High Clarity				
Plasticized Renewable Resource Content Soft Uses Handles Medical/Healthcare Applications Appearance Amber Black Clear/Transparent Natural Color Forms Pellets Physical Nominal Value Init Molding Shrinkage - Flow 0.20 to 0.60 % Gattom Despice Molding Shrinkage - Flow 0.20 to 0.60 % Gattom Despice Metardness Nominal Value Moltom Despice Molding Shrinkage - Flow 1.4 % Gattom Despice Moter % Gattom Despice Moltom Despice Reckwell Hardness (R-Scale, 23°C) 78 Settom Despice Mehanical Nominal Value Moltom Cesttom Despice Tenski Extength Sattom Despice Sattom Despice Yield, 23°C 33.1 MPa		High Gloss				
Renewable Resource Content Soft Uses Handles Medica/Healthcare Applications Appearance Amber Black Clear/Transparent Natural Color Specific Gravity Pellets Moding Shrinkage - Flow 20 to 0.60 %1 Motod Specific Gravity 1.9 gravitations Mater Absorption (23°C, 24 hr) 1.4 %1 Motod Rockwell Hardness (R-Scale, 23°C) 78 Estender Kethanical Nominal Value Unita Test Method Rockwell Hardness (R-Scale, 23°C) 78 Estender Strin D570 Rockwell Hardness (R-Scale, 23°C) 78 Estender Strin D638 Yeld, 23°C 3.1 MPa Estender Yeld, 23°C 434 MPa Estender		High Hardness				
Soft Uses Handles Medical/Healthcare Applications Appearance Amber Black Clear/Transparent Natural Color Forms Pellets Physical Nominal Value Unit Test Method Specific Gravity 199 Moding Shrinkage - Flow 2010 0.60 Moding Shrinkage - Flow 2010 0		Plasticized				
Handles Medical/Healthcare Applications Appearance Amber Black Clear/Transparent Clear/Transparent Clear/Transparent Natural Color Vellets Forms Pellets Specific Gravity 1.19 Vominal Value Vominal Value Moding Shrinkage - Flow 0.20 to 0.60 % ASTM D955 Mater Absorption (23°C, 24 hr) 1.4 % ASTM D955 Rockwell Hardness (R-Scale, 23°C) 78 Test Method Rockmail Nominal Value Unit Test Method Tensile Strength Saita Meia ASTM D765 Yeld, 23°C 3.11 MPa Saita Forak, 23°C 434 MPa Saita		Renewable Resource Content				
AppearanceAmber Black Clear/Transparent Natural ColorSecond SecondFormsPelletsFormsPelletsPhysicalNominal ValueUnitModial Shrinkage - Flow0.20 to 0.60% AGTM D792Modial Shrinkage - Flow1.4% AGTM D555Motar Absorption (23°C, 24 hr)1.4% AGTM D570Natural Color% AGTM D570MechanicalNominal ValueUnitRockwell Hardness (R-Scale, 23°C)78Kath D702Mominal ValueUnitTest MethodTensile StrengthImage Alian (MPa)Mana (MPa)Yield, 23°C33.1MPaBreak, 23°C43.4MPa		Soft				
AppearanceAmber Black Clear/Transparent Natural ColorSecond SecondFormsPelletsFormsPelletsPhysicalNominal ValueUnitModial Shrinkage - Flow0.20 to 0.60% AGTM D792Modial Shrinkage - Flow1.4% AGTM D555Motar Absorption (23°C, 24 hr)1.4% AGTM D570Natural Color% AGTM D570MechanicalNominal ValueUnitRockwell Hardness (R-Scale, 23°C)78Kath D702Mominal ValueUnitTest MethodTensile StrengthImage Alian (MPa)Mana (MPa)Yield, 23°C33.1MPaBreak, 23°C43.4MPa						
AppearanceAmber Back Clear/Transparent Natural ColorFormsPelletsPhysicalNominal ValuePhysicalNominal ValueMolding Shrinkage - Flow0.20 to 0.60Water Absorption (23°C, 24 hr)1.4Nominal ValueUnitNominal ValueGron³More Strength78Rockwell Hardness (R-Scale, 23°C)78Yield, 23°C33.1Mater Absorption33.1Mater Absorption33.1Mater Absorption33.1Mater Absorption33.1Mater Absorption34.4Mater Absorption34.1Mater Absorption34.1Mater Absorption34.1Mater Absorption34.1Mater Absorption34.1Mater AbsorptionMater AbsorptionMater Absorption34.1Mater AbsorptionMater AbsorptionMater Absorption34.1Mater AbsorptionMater Absorption<	Uses	Handles				
Black Clear/Transparent Natural Color 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 D555 Water Absorption (23°C, 24 hr) 1.4 % ASTM D570 Rockwell Hardness (R-Scale, 23°C) 78 Test Method Rockwell Hardness (R-Scale, 23°C) 78 Test Method Tensile Strength Vinit Test Method Yield, 23°C 33.1 MPa Break, 23°C 43.4 MPa		Medical/Healthcare Applications				
Black Clear/Transparent Natural Color 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 D555 Water Absorption (23°C, 24 hr) 1.4 % ASTM D570 Rockwell Hardness (R-Scale, 23°C) 78 Test Method Rockwell Hardness (R-Scale, 23°C) 78 Test Method Tensile Strength Vinit Test Method Yield, 23°C 33.1 MPa Break, 23°C 43.4 MPa						
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 D795 Water Absorption (23°C, 24 hr) 1.4 % ASTM D701 Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale, 23°C) 78 XITM D785 Mechanical Nominal Value Unit Test Method Tessile Strength Saint Drate Mark ASTM D785 Yield, 23°C 33.1 MPa Yeld Yeld Mark Mark Brak, 23°C 43.4 MPa Yeld Yeld Mark Mark	Appearance	Amber				
Natural ColorFormsPelletsPhysicalNominal ValueUnitTest MethodSpecific Gravity1.19g/cm³ASTM D792Molding Shrinkage - Flow0.20 to 0.60%ASTM D955Water Absorption (23°C, 24 hr)1.4%ASTM D570HardnessNominal ValueUnitTest MethodRockwell Hardness (R-Scale, 23°C)78Test MethodTensile StrengthNominal ValueUnitTest MethodTensile StrengthSailMPaSTM D638Yield, 23°C33.1MPaStm D570Break, 23°C43.4MPaStm D570		Black				
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 Marchaness Nominal Value Unit Test Method Rockwell Hardness (R-Scale, 23°C) 78 ASTM D785 Mechanical Nominal Value Unit Test Method Tensile Strength Sainal Value Unit Test Method Yield, 23°C 33.1 MPa Lucccccccccccccccccccccccccccccccccccc		Clear/Transparent				
PhysicalNominal ValueUnitTest MethodSpecific Gravity1.19g/cm³ASTM D792Molding Shrinkage - Flow0.20 to 0.60%ASTM D955Water Absorption (23°C, 24 hr)1.4%ASTM D570HardnessNominal ValueUnitTest MethodRockwell Hardness (R-Scale, 23°C)78STM D785MechanicalNominal ValueUnitTest MethodTensile StrengthS1M D40eUnitTest MethodYield, 23°C33.1MPaSTM D638Break, 23°C43.4MPaStm D570		Natural Color				
PhysicalNominal ValueUnitTest MethodSpecific Gravity1.19g/cm³ASTM D792Molding Shrinkage - Flow0.20 to 0.60%ASTM D955Water Absorption (23°C, 24 hr)1.4%ASTM D570HardnessNominal ValueUnitTest MethodRockwell Hardness (R-Scale, 23°C)78STM D785MechanicalNominal ValueUnitTest MethodTensile StrengthS1M D40eUnitTest MethodYield, 23°C33.1MPaSTM D638Break, 23°C43.4MPaStm D570						
Specific Gravity1.19g/cm³ASTM D792Molding Shrinkage - Flow0.20 to 0.60%ASTM D955Water Absorption (23°C, 24 hr)1.4%ASTM D570HardnessNominal ValueUnitTest MethodRockwell Hardness (R-Scale, 23°C)78ASTM D785MechanicalNominal ValueUnitTest MethodTensile StrengthS11MPaYield, 23°C33.1MPaBreak, 23°C43.4MPa	Forms	Pellets				
Molding Shrinkage - Flow0.20 to 0.60%ASTM D955Water Absorption (23°C, 24 hr)1.4%ASTM D570HardnessNominal ValueUnitTest MethodRockwell Hardness (R-Scale, 23°C)78ASTM D785MechanicalNominal ValueUnitTest MethodTensile StrengthS11MPaYield, 23°C33.1MPaBreak, 23°C43.4MPa	Physical	Nominal Value	Unit	Test Method		
Water Absorption (23°C, 24 hr)1.4%ASTM D570HardnessNominal ValueUnitTest MethodRockwell Hardness (R-Scale, 23°C)78ASTM D785MechanicalNominal ValueUnitTest MethodTensile StrengthSTM D638Yield, 23°C33.1MPaBreak, 23°C43.4MPa	Specific Gravity	1.19	g/cm³	ASTM D792		
HardnessNominal ValueUnitTest MethodRockwell Hardness (R-Scale, 23°C)78ASTM D785MechanicalNominal ValueUnitTest MethodTensile StrengthSTM D638ASTM D638Yield, 23°C33.1MPaSTM D638Break, 23°C43.4MPaStm D638	Molding Shrinkage - Flow	0.20 to 0.60	%	ASTM D955		
Rockwell Hardness (R-Scale, 23°C)78ASTM D785MechanicalNominal ValueUnitTest MethodTensile StrengthSTM D638Yield, 23°C33.1MPaBreak, 23°C43.4MPa	Water Absorption (23°C, 24 hr)	1.4	%	ASTM D570		
MechanicalNominal ValueUnitTest MethodTensile StrengthASTM D638Yield, 23°C33.1MPaBreak, 23°C43.4MPa	Hardness	Nominal Value	Unit	Test Method		
Tensile StrengthASTM D638Yield, 23°C33.1MPaBreak, 23°C43.4MPa	Rockwell Hardness (R-Scale, 23°C)	78		ASTM D785		
Yield, 23°C 33.1 MPa Break, 23°C 43.4 MPa	Mechanical	Nominal Value	Unit	Test Method		
Break, 23°C 43.4 MPa	Tensile Strength			ASTM D638		
	Yield, 23°C	33.1	MPa			
Tensile Elongation (Break, 23°C) 50 % ASTM D638	Break, 23°C	43.4	MPa			
	Tensile Elongation (Break, 23°C)	50	%	ASTM D638		

Flexural Modulus (23°C) Flexural Strength (Yield, 23°C) Impact	1380 45.5	MPa MPa	ASTM D790
-	45.5	MPa	
Impact		IVII a	ASTM D790
	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-40°C	96	J/m	
23°C	240	J/m	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load ¹			ASTM D648
0.45 MPa, Annealed	85.0	°C	
1.8 MPa, Annealed	74.0	°C	
Vicat Softening Temperature ²	104	°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	ASTM C351
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)	0.50	%	ASTM D707
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		

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

