

Technical Data Sheet

Tenite™ Butyrate 285A2R30018 Natural Trsp

Applications

- Electronic connectors
- Ophthalmics
- Profiles
- Tools

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™ 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 285-18 has a plasticizer level of 18% and contains an odor mask.

Typical Properties

Property ^a	Test Method ^b	Typical Value, Units ^c
General		
Plasticizer		18 %
Specific Gravity	D 792	1.17
Mechanical Properties		
Tensile Stress @ Yield	D 638	23.5 MPa (3400 psi)
Tensile Stress @ Break	D 638	30.7 MPa (4500 psi)
Elongation @ Break	D 638	50 %
Flexural Modulus	D 790	1034 MPa (1.50 x 10 ⁵ psi)
Flexural Yield Strength	D 790	30.4 MPa (4400 psi)
Rockwell Hardness, R Scale	D 785	26
Izod Impact Strength, Notched		
@ 23°C (73°F)	D 256	358 J/m (6.7 ft·lbf/in.)
@ -40°C (-40°F)	D 256	110 J/m (2.1 ft·lbf/in.)
Permanence Properties		
Water Absorption, 24 h immersion	D 570	1.3 %
Soluble Matter Loss	D 570	0.1 %
Weight Loss on Heating [72 hours @ 80°C (176°F)]	D 707	0.9 %
Thermal Properties		
Deflection Temperature ^d		
@ 0.455 MPa (66 psi)	D 648	75 °C (167 °F)
@ 1.82 MPa (264 psi)	D 648	61 °C (142 °F)
Vicat Softening Temperature ^d	D 1525	94 °C (202 °F)

^aUnless noted otherwise, all tests are run at 23°C (73°F) and 50% relative humidity.

^bUnless noted otherwise, the test method is ASTM.

^cUnits are in SI or US customary units.

^dConditioned 4 hours @ 70°C (158°F)

Characteristics

Formula 285 - odor mask.

Comments

Properties reported here are based on limited testing. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

Eastman and its marketing affiliates shall not be responsible for the use of this information, or of any product, method, or apparatus mentioned, and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and for the health and safety of your employees and purchasers of your products. No warranty is made of the merchantability of fitness of any product, and nothing herein waives any of the Seller's conditions of sale.

3/27/2018 9:09:38 AM

© 2019 Eastman Chemical Company or its subsidiaries. All rights reserved. As used herein, ® denotes registered trademark status in the U.S. only.