

Nanoreinforced[®] Cellulose Propionate Acetate

Product Description

Nanoreinforced[®] Cellulose Propionate Acetate is an optically clear nanocomposite with POSS[®] dispersed at the nanometer level. Compared to virgin cellulose propionate acetate, it enhances mechanical properties and high use temperatures while maintaining the clarity of cellulose propionate acetate. Other property improvements include fire retardancy, water/oxygen permeation, and oil-chemical resistance.

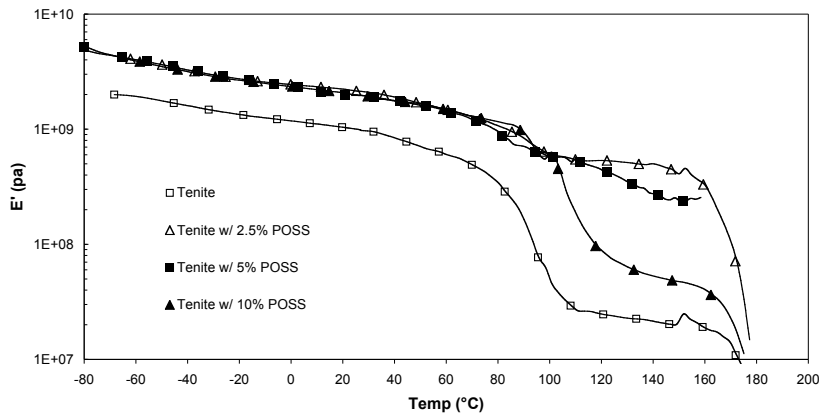
Key Performance Properties

- *High use temperature*
- *Fire retardancy*

Typical Mechanical Properties for Nanostructured POSS[®] MBCPA.1455.2.5¹

Property	Value
Tensile Strength (23°C)	23MPa / 3.3Ksi
Tensile Modulus (23°C)	1050MPa / 152Ksi
Elongation at Yield (23°C)	25%
Tensile Strength (120°C)	8MPa / 1.2Ksi
Tensile Modulus (120°C)	14MPa / 2.0Ksi
Elongation at Yield(120°C)	160%
Tg	94 °C / 201°F
Reflection Index (644nm)	1.4711
Transparency (%)	76±5

1. 2.5 wt% POSS[®] reinforced cellulose propionate acetate.



Elastic (Storage) Modulus of cellulose propionate and cellulose propionate with POSS[®]

Sales/Technical Service

55 W.L. Runnels Industrial Drive
 Hattiesburg, MS 39401
info@hybridplastics.com

Phone

601.544.3466

Fax

601.545.3103