Product Data Sheet

Eastman™ Cellulose Acetate Butyrate (CAB-531-1)

Application/Uses

- Automotive OEM
- Coatings
- Coatings for Automotive Plastics
- Coatings for plastic
- Food-contact applications
- Nail care
- Truck/Bus/Commercial Vehicles

Product Description

Remarkable polymers with a renewable backbone provided by nature itself.

Eastman™ Cellulose Acetate Butyrate (CAB-531-1) is a cellulose ester with a higher butyryl level than Eastman™ CAB-381 type esters. Tough films with good resistance to marring and weathering are possible through combinations of cellulose acetate butyrate with thermoplastic acrylic resins. Eastman™ CAB-531-1 and CAB-381 esters are similar in hydroxyl content and solubility characteristics, both being soluble in a wide range of solvents. Eastman™ CAB-531-1 is a more flexible resin requiring lower plasticizer modification than the Eastman™ CAB-381 esters. Eastman™ cellulose esters are based on up to sixty percent cellulose, one of the most abundant natural renewable resources.

Typical Properties

Property	Typical Value, Units
Butyryl Content	50 wt %
Acetyl Content	2.8 wt %
Hydroxyl Content	1.7%
Viscosity [a]	5.6 poise
Color [b]	50 ppm
Haze [b]	15 ppm
Acidity as Acetic Acid	0.02 wt %
Ash Content	0.05%
Refractive Index	1.475
Heat Test @ 160°C for 8 hr	Tan melt
Melting Point	135-150°C
Glass Transition Temperature (T_g)	115°C
Specific Gravity	1.17
Wt/Vol (Cast Film)	1.17 kg/L (9.75 lb/gal)

Bulk Density	
Poured	480 kg/m^3 (30 lb/ft^3)
Tapped	576 kg/m^3 (36 lb/ft^3)
Dielectric Strength	787-984 kv/cm (2-2.5 kv/mil)
Molecular Weight [c] M_n	40000
Tukon Hardness	15 Knoops

[a] *Viscosity determined by ASTM Method D 1343. Results converted to poises (ASTM Method D 1343) using the solution density for Formula A as stated in ASTM Method D 817 (20% Cellulose ester, 72% acetone, 8% ethyl alcohol).*

[b] *Determination of color and haze made on CAB solutions using Pt-Co standard (color) and a monodisperse latex suspension (haze). Analysis performed with a Gardner Model XL-835 colorimeter.*

[c] *Polystyrene equivalent number average molecular weight determined by gel permeation chromatography.*

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.