EASTMAN

Technical Data Sheet

Eastman™ Cellulose Acetate Butyrate (CAB-531-1), Food Contact

Applications

- Commerical printing inks
- Flexographic printing inks
- Food can coatings internal
- Graphic arts
- Gravure printing inks
- Labels - food packaging - food contact
- Overprint varnishes
- Pack & carton coatings
- Packaging inks food contact
- Tape - food packaging - food contact

Product Description

Eastman Cellulose Acetate Butyrate (CAB-531-1, Food Contact) 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 and thermoplastic acrylic resins. Eastman CAB-531-1, Food Contact 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, Food Contact is a more flexible resin that requires lower plasticizer modification than the Eastman CAB-381 esters. When CAB-531-1, Food Contact is dissolved in appropriate solvents a clear, colorless solution is produced.

Eastman CAB-531-1, Food Contact is based on cellulose, one of the most abundant natural renewable resources, from trees harvested from sustainably managed forests. The calculated approximate bio-content value of 38% for Eastman CAB-531-1, Food Contact was determined by using six bio-based carbon atoms per anhyroglucose unit divided by the total number of carbons per anhyroglucose unit. Although the value reported is not specifically measured for bio-carbon, it can be estimated based on typical partition data.

This product is manufactured, stored, handled and transported by Eastman under conditions adhering to current Good Manufacturing Practices for food contact applications. This product meets requirements for use in certain food contact applications under regulations of the U.S. Food and Drug Administration (21 CFR), European Commission (Regulation 10/2011) and the Swiss Ordinance on Materials & Articles in Contact with Food (SR 817.023.21). Contact your Eastman representative or authorized Eastman distributor for specific regulatory compliance documentation.

For applications that do not require food contact compliance, please refer to Eastman CAB-531-1.

Typical Properties

Property	Typical Value, Units
General	
Viscosity[a]	
s	2
Poise	5.6
Acetyl Content	3 wt %
Butyryl Content	50 wt %
Hydroxyl Content	1.7 %
Moisture Content	3.0 max %
Tg[b]	115 °C

Melting range	135-150 °C
Bulk Density	
Poured	480 kg/m^3 (30 lb/ft^3)
Tapped	576 kg/m^3 (36 lb/ft^3)
Specific Gravity	1.17
Acidity	
as Acetic Acid	0.02 wt %
Ash Content	0.05 %
Refractive Index	1.475
Dielectric Strength	787-984 kv/cm (2-2.5 kv/mil)
Tukon Hardness	15 Knoops
Wt/Vol	
(Cast Film)	1.17 kg/L (9.75 lb/gal)
Heat Test	
@ 160°C for 8 hr	Tan melt

[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]*Glass Transition Temperature*

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.

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