EASTMAN

Technical Data Sheet

Eastman™ Cellulose Acetate Butyrate (CAB-381-20), Food Contact

Applications

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

Product Description

Eastman Cellulose Acetate Butyrate CAB-381-20, Food Contact is a cellulose ester with medium butyryl content and high ASTM(A) viscosity. Other than a higher viscosity and higher molecular weight, this cellulose ester shares the same general characteristics as CAB-381-0.1 and CAB-381-0.5. Eastman CAB-381-20, Food Contact offers a combination of solubility and compatibility, moisture resistance, excellent surface hardness and good film strength. When CAB-381-20, Food Contact is dissolved in appropriate solvents a clear, colorless solution is produced. CAB-381-20 is supplied as a dry, free-flowing powder.

Eastman CAB-381-20, 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 41% for Eastman CAB-381-20, 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-381-20.

Typical Properties

Property	Typical Value, Units
General	
Viscosity[a]	
s	20
Poise	76
Acetyl Content	13.5 wt %
Butyryl Content	37 wt %
Hydroxyl Content	1.8 %
Moisture Content	3.0 max %
Tg[b]	141 °C
Melting range	195-205 °C

Bulk Density	
Poured	336 kg/m^3 (21 lb/ft^3)
Tapped	432 kg/m^3 (27 lb/ft^3)
Specific Gravity	1.2
Acidity	
as Acetic Acid	<0.03 wt %
Ash Content	0.05 %
Refractive Index	1.475
Dielectric Strength	787-984 kv/cm (2-2.5 kv/mil)
Tukon Hardness	18 Knoops
Wt/Vol	
(Cast Film)	1.2 kg/L (10.0 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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