EASTMAN

Technical Data Sheet

Eastman™ Cellulose Acetate Butyrate (CAB-381-20)

Applications

- Aerosol coatings
- Aerospace coatings
- Architectural coatings
- Auto oem
- Auto plastics
- Auto refinish
- Automotive
- Automotive parts & accessories
- Building materials
- Coil coatings
- Coil coatings-appliances
- Commerical printing inks
- Compensation film
- Consumer electronics
- Cosmetic ingredients - nails
- Exterior architectural coatings
- Flexographic printing inks
- General industrial coatings
- Graphic arts
- Gravure printing inks
- Industrial electronics
- Industrial maintenance
- Leather coatings
- Metal coatings
- Motorcycles
- Non-medical housings & hardware for elec
- Nonwoven substrates
- Other-transportation
- Outdoor signs
- Pack & carton coatings
- Packaging inks non food contact
- Paints & coatings
- Photographic imaging film
- Polymer modification
- Process additives
- Process solvents
- Protective coatings
- Rubber and plastic additives
- Screen printing inks
- Shelving solutions-retail
- Small appliances non-food contact
- Tools
- Touch screen
- Truck/bus/rv
- Wood coatings
- Wood furniture exterior

Product Description

Eastman Cellulose Acetate Butyrate (CAB-381-20) 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. CAB-381-20 offers a combination of solubility and compatibility, moisture resistance, excellent surface hardness and good film strength. When CAB-381-20 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 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 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.

For applications that require food contact compliance, please refer to Eastman CAB-381-20, Food Contact.

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 Transiton 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.