EASTMAN

Technical Data Sheet

Eastman™ Cellulose Acetate Butyrate (CAB-381-0.5)

Applications

- Aerosol coatings
- Aerospace coatings
- Apparel
- Architectural coatings
- Auto oem
- Auto plastics
- Auto refinish
- Automotive
- Automotive parts & accessories
- Automotive protective coatings
- Coil coatings
- Coil coatings-appliances
- Commerical printing inks
- Compensation film
- Consumer electronics
- Exterior architectural coatings
- Flexographic printing inks
- General industrial coatings
- Graphic arts
- Gravure printing inks
- Industrial electronics
- Industrial maintenance
- Inks
- Leather coatings
- Metal coatings
- Metal furniture
- Metals
- Motorcycles
- Non-medical housings & hardware for elec
- Overprint varnishes
- Pack & carton coatings
- Packaging coatings non food contact
- Packaging inks non food contact
- Paints & coatings
- Personal care ingredients
- Photographic chemicals
- Polymer modification
- Process additives
- Protective coatings
- Screen printing inks
- Shrink film non food contact
- Small appliances non-food contact
- Tools
- Truck/bus/rv
- Wood coatings

Product Description

Eastman Cellulose Acetate Butyrate (CAB-381-0.5) is a cellulose ester with medium butyryl content and low viscosity. It was designed for use where low-application viscosities at relatively high solids levels is needed. It is soluble in a wide range of solvents and compatible with many other resins. When CAB-381-0.5 is dissolved in appropriate solvents a clear, colorless solution is produced. It will also tolerate the use of solvent blends currently exempt from certain air pollution regulations. It is supplied as a dry, free-flowing powder.

Eastman CAB-381-0.5 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 40% for Eastman CAB-381-0.5 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 CAB-381-0.5, Food Contact.

Typical Properties

Property	Typical Value, Units
General	
Viscosity[a]	
s	0.5
Poise	1.9
Acetyl Content	13.5 wt %
Butyryl Content	38 wt %
Hydroxyl Content	1.5 %
Moisture Content	3.0 max %
Tg[b]	130 °C
Melting range	155-165 °C
Bulk Density	
Poured	352 kg/m^3 (22 lb/ft^3)
Tapped	465 kg/m^3 (39 lb/ft^3)
Specific Gravity	1.2
Acidity	
as Acetic Acid	0.03 wt %
Ash Content	<0.05 %
Refractive Index	1.48
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.