



Technical Data Sheet Eastman™ Cellulose Acetate Butyrate (CAB-381-0.5)

Applications

- · Auto oem
- Auto plastics
- · Auto refinish
- Automotive
- Automotive parts & accessories
- Automotive protective coatings
- · Personal care ingredients
- · Shrink film non food contact
- Small appliances non-food contact

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. 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 wt %	
Moisture Content	3.0 max %	
Tg ^b	130 °C	
Bulk Density		
Poured	$352 \text{ kg/m}^3 (22 \text{ lb/ft}^3)$	
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

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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^aViscosity 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).

^bGlass Transition Temperature