

# Technical Data Sheet

## Eastman™ Cellulose Acetate Butyrate (CAB-531-1)

### Applications

- Ace machinery & equipment
- Adhesives/sealants-b&c
- Aerosol coatings
- Apparel
- Architectural coatings
- Auto oem
- Auto plastics
- Auto refinish
- Automotive
- Automotive parts & accessories
- Automotive protective coatings
- Coil coatings
- Coil coatings-appliances
- Commercial printing inks
- Compensation film
- Consumer electronics
- Consumer housewares-nfc
- Exterior architectural coatings
- Flexographic printing inks
- Fugitive binder
- General industrial coatings
- Graphic arts
- Gravure printing inks
- Industrial electronics
- Industrial maintenance
- Leather coatings
- Metal coatings
- Metal furniture
- Non-medical housings & hardware for elec
- Other-transportation
- Overprint varnishes
- Pack & carton coatings
- Paints & coatings
- Protective coatings
- Roofing
- Safety glasses/shield
- Small appliances non-food contact
- Solar panels
- Tac film
- Truck/bus/rv
- Wood coatings

### Product Description

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

Eastman CAB-531-1 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 was determined by using six bio-based carbon atoms per anhydroglucose unit divided by the total

number of carbons per anhydroglucose 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-531-1, Food Contact.

## Typical Properties

Property	Typical Value, Units
<b>General</b>	
Viscosity <sup>a</sup>	
s	2
Poise	5.6
Acetyl Content	3 wt %
Butyryl Content	50 wt %
Hydroxyl Content	1.7 %
Moisture Content	3.0 max %
T <sub>g</sub> <sup>b</sup>	115 °C
Melting range	135-150 °C
Bulk Density	
Poured	480 kg/m <sup>3</sup> (30 lb/ft <sup>3</sup> )
Tapped	576 kg/m <sup>3</sup> (36 lb/ft <sup>3</sup> )
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 Knoop
Wt/Vol	
(Cast Film)	1.17 kg/L (9.75 lb/gal)
Heat Test	
@ 160°C for 8 hr	Tan melt

<sup>a</sup>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).

<sup>b</sup>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.

*Eastman and its marketing affiliates shall not be responsible for the use of this information, or of any product, method, or apparatus mentioned, and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and for the health and safety of your employees and purchasers of your products. No warranty is made of the merchantability of fitness of any product, and nothing herein waives any of the Seller's conditions of sale.*

9/27/2019 4:42:58 PM