

# Technical Data Sheet

## Eastman™ Cellulose Acetate Butyrate (CAB-381-0.5), Food Contact

### Applications

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

### Product Description

Eastman Cellulose Acetate Butyrate (CAB-381-0.5, Food Contact) 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, Food Contact 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, 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 40% for Eastman CAB-381-0.5, Food Contact 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.

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 381-0.5.

### Typical Properties

| Property               | Typical Value, Units |
|------------------------|----------------------|
| <b>General</b>         |                      |
| Viscosity <sup>a</sup> |                      |
| 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 <sup>b</sup>        | 130 °C               |

|                     |  |
|---------------------|--|
| Melting range       | 155-165 °C                                     |
| Bulk Density        |  |
| Poured              | 352 kg/m <sup>3</sup> (22 lb/ft <sup>3</sup> ) |
| Tapped              | 465 kg/m <sup>3</sup> (39 lb/ft <sup>3</sup> ) |
| 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 Knoop                                       |
| Wt/Vol              |  |
| (Cast Film)         | 1.2 kg/L (10.0 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.

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