ENSTMAN

Technical Data Sheet



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. 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 wt % |
| Moisture Content | 3.0 max % |
| Tg ^b | 141 °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 |

^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 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.

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