

# EASTMAN

### **Product Data Sheet**

### Eastman™ Cellulose Acetate Butyrate (CAB-381-20)

#### Application/Uses

- Automotive OEM
- Coatings
- Coatings for Automotive Plastics
- Coatings for cloth
- Coatings for leather
- Coatings for plastic
- Coatings for wood
- Heat seal adhesive
- Lacquers for automotive
- Lacquers for paper
- Lacquers for plastic
- Lacquers for wood
- Nail care
- Truck/Bus/Commercial Vehicles

#### **Product Description**

Remarkable polymers with a renewable backbone provided by nature itself.

Eastman™ Cellulose Acetate Butyrate (CAB-381-20) is a cellulose ester with high 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. CAB-381-20 is supplied as a dry, free-flowing powder. Eastman™ cellulose esters are based on up to sixty percent cellulose, one of the most abundant natural renewable resources.

## **Typical Properties**

Property	Typical Value, Units
Butyryl Content	37 wt %
Acetyl Content	13.5 wt %
Hydroxyl Content	1.8%
Viscosity <sup>a</sup>	76 poise
Color <b>b</b>	125 ppm
Haze <b>b</b>	35 ppm
Acidity as Acetic Acid	<0.03 wt %
Ash Content	0.05%
Refractive Index	1.475
Heat Test @ 160°C for 8 hr	Tan melt

Melting Point	195-205°C
Specific Gravity	1.2
Wt/Vol (Cast Film)	1.2 kg/L (10.0 lb/gal)
Bulk Density	
Poured	336 kg/m $^{3}$ (21 lb/ft $^{3}$ )
Tapped	432 kg/m $^3$ (27 lb/ft $^3$ )
Dielectric Strength	787-984 kv/cm (2-2.5 kv/mil)
Molecular Weight <sup>c</sup> M <sub>n</sub>	70000
Glass Transition Temperature (T <sub>g</sub> )	141°C
Tukon Hardness	18 Knoops

<sup>&</sup>lt;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).

#### **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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**b** Determination of color and haze made on a solution of the cellulose ester dissolved in MIBK using Pt-Co color standards and Johns-Manville Celite (diatomaceous silica products) haze standards.

<sup>&</sup>lt;sup>c</sup> Polystyrene equivalent number average molecular weight determined by gel permeation chromatography.