

Technical Data Sheet

Cellulose Acetate Butyrate

KIMACELL® CAB-381-2

KIMACELL® Cellulose Acetate Butyrate (CAB-381-2) is a cellulose ester with high butyryl content and high ASTM(A) viscosity. Cellulose acetate butyrate (CAB) is a clear, tough thermoplastic ester made from cellulose modified with both acetate and butyrate groups. 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. CAB-381-2 offers a combination of solubility and compatibility, moisture resistance, excellent surface hardness, and good film strength. It is supplied as a dry, free-flowing powder.

Properties

Property	Typical Value, Units
Butyryl Content	38 wt %
Acetyl Content	13.5 wt %
Hydroxyl Content	1.3%
Viscosity ^a	7.6 poise
Color ^b	125 ppm
Haze ^b	35 ppm
Acidity as Acetic Acid	<0.03 wt % max.
Ash Content	0.05%
Refractive Index	1.475
Heat Test @ 160°C for 8 hr	Tan melt
Melting Point	171-184°C
Specific Gravity	1.2
Wt/Vol (Cast Film)	1.2 kg/L (10.0 lb/gal)
Bulk Density	
Poured	352 kg/m ³ (22 lb/ft ³)
Tapped	465 kg/m ³ (29 lb/ft ³)
Dielectric Strength	787-984 kv/cm (2-2.5 kv/mil)
Glass Transition Temperature (T _g)	133°C
Molecular Weight ^c M _n	40000
Tukon Hardness	18 Knoop

a 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).

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.

c Polystyrene equivalent number average molecular weight determined by gel permeation chromatography.

Applications

- Automotive OEM
- Coatings for Automotive
- Plastics
- Coatings for cloth
- Coatings for leather
- Coatings for plastic
- Truck/Bus/Commercial Vehicles

PACKAGE:20KG BAG.