EASTMAN

Technical Data Sheet

Eastman™ Cellulose Acetate Butyrate (CAB-551-0.2)

Chemical Synonym

Cellulose Acetate Butyrate

Applications

- Ace machinery & equipment
- Adhesives/sealants-b&c
- Aerospace coatings
- Alkyd resins
- Apparel
- Architectural coatings
- Auto oem
- Auto plastics
- Auto refinish
- Automotive
- Automotive parts & accessories
- Automotive protective coatings
- Can coating internal
- Can coatings external coating
- Coil coatings
- Coil coatings-appliances
- Commerical printing inks
- Compensation film
- Consumer electronics
- Diapers
- Electronic chemicals
- Exterior architectural coatings
- Flexographic printing inks
- Fugitive binder
- General industrial coatings
- Graphic arts
- Gravure printing inks
- Industrial electronics
- Industrial maintenance
- Inkjet printing inks
- Leather coatings
- Metal coatings
- Metal furniture
- Metals
- Motorcycles
- Non-medical housings & hardware for elec
- Pack & carton coatings
- Packaging coatings non food contact
- Packaging inks non food contact
- Paints & coatings
- Personal care ingredients
- Photographic imaging film
- Process additives
- Protective coatings
- Small appliances non-food contact
- Solar panels
- Truck/bus/rv
- Water treatment industrial
- Wood coatings

Product Description

Eastman Cellulose Acetate Butyrate (CAB-551-0.2) is a cellulose ester with high butyryl content and relatively low molecular weight. It is compatible with numerous cross-linking resins and has a lower solution viscosity. In coatings, Eastman CAB-551-0.2 gives clear films, reduces surface tack and mottling, minimizes cratering, improves flow and thermal reflow, and provides inter coat adhesion and good UV stability. It is useful for durable cross-linked formulations. Its good compatibility with a wide range of curing resin systems and its solubility in a wide variety of solvents and solvent combinations make it useful as an additive in numerous coating compositions. 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
General	
Butyryl Content	52 wt %
Acetyl Content	2 wt %
Hydroxyl Content	1.8 %
Viscosity[a]	0.76 poise
Color[b]	50 ppm
Haze[b]	15 ppm
Acidity	
as Acetic Acid	0.02 wt %
Ash Content	<0.05 %
Refractive Index	1.475
Melting Point	130-140 °C
Glass Transition Temperature (T_g)	101 °C
Specific Gravity	1.16
Wt/Vol	1.16 kg/L (9.67 lb/gal)
Bulk Density	
Poured	515 kg/m^3 (32 lb/ft^3)
Tapped	612 kg/m^3 (38 lb/ft^3)
Dielectric Strength	787-984 kv/cm (2-2.5 kv/mil)
Molecular Weight[c]	
M_n	30000
Tukon Hardness	15 Knoops

[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 CAB-551-0.2 dissolved in a Rule 66 exempt blend of lacquer solvents, using Pt-Co color standards and a monodisperse polystyrene latex suspension haze standard.*
[c]*Polystyrene equivalent number average molecular weight determined by gel permeation chromatography.*

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.
