



Technical Data Sheet

Applications

- Apparel
- · Architectural coatings
- Auto oem
- Auto plastics
- · Auto refinish
- Automotive
- · Automotive parts & accessories
- Automotive protective coatings
- Commerical printing inks
- · Compensation film
- Consumer electronics
- Formulators
- Fugitive binder
- General industrial coatings
- Graphic arts
- · Industrial maintenance
- Inkjet printing inks
- Inks
- Leather coatings
- Metal coatings
- Non-medical housings & hardware for elec
- Packaging coatings non food contact
- Packaging inks non food contact
- Paints & coatings
- Photographic imaging film
- Process additives
- Process solvents
- Protective coatings
- Solar panels
- · Specialty tape
- · Water treatment industrial
- Wood coatings

Product Description

Eastman Cellulose Acetate Butyrate (CAB-500-5) is a cellulose ester with high butyryl content, low hydroxyl content and medium ASTM(A) viscosity. It offers a wide range of solubility and compatibility. It is tolerant of nonpolar aliphatic and aromatic hydrocarbons. It produces a relatively soft, flexible film requiring little or no plasticizer in many applications. When CAB-500-5 is dissolved in appropriate solvents a clear, colorless solution is produced. Eastman CAB-500-5 is supplied as a dry, white free-flowing powder and is convenient to handle.

Eastman CAP-500-5 is based on cellulose, one of the most abundant natural renewable resources. The calculated approximate bio-content value of 37% for Eastman CAB-500-5 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.

Typical Properties

Property	Typical Value, Units
General	
Viscosity ^a	
S	5
Poise	19

Butyryl Content 51 wt % Hydroxyl Content 1 wt % Moisture Content 3.0 max % Tgb 96 °C Bulk Density 96 °C Poured 400 kg/m³ (25 lb/ft³) Tapped 512 kg/m³ (32 lb/ft³) Specific Gravity 1.18 Acidity 0.03 wt % Ash Content 0.05 % Refractive Index 1.475 Dielectric Strength 787-984 kv/cm (2-2.5 kv/mil) Tukon Hardness 14 Knoops Wt/Vol (Cast Film) 1.18 kg/L (9.83 lb/gal) Heat Test @ 160°C for 8 hr Tan melt	Acetyl Content	3 wt %
Moisture Content 3.0 max % Tgb 96 °C Bulk Density 400 kg/m³ (25 lb/ft³) Poured 400 kg/m³ (32 lb/ft³) Specific Gravity 1.18 Acidity 0.03 wt % Ash Content 0.05 % Refractive Index 1.475 Dielectric Strength 787-984 kv/cm (2-2.5 kv/mil) Tukon Hardness 14 Knoops Wt/Vol (Cast Film) 1.18 kg/L (9.83 lb/gal) Heat Test	Butyryl Content	51 wt %
Tgb 96 °C Bulk Density Poured 400 kg/m³ (25 lb/ft³) Tapped 512 kg/m³ (32 lb/ft³) Specific Gravity 1.18 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 14 Knoops Wt/Vol (Cast Film) 1.18 kg/L (9.83 lb/gal) Heat Test	Hydroxyl Content	1 wt %
Bulk Density Poured 400 kg/m³ (25 lb/ft³) Tapped 512 kg/m³ (32 lb/ft³) Specific Gravity 1.18 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 14 Knoops Wt/Vol (Cast Film) 1.18 kg/L (9.83 lb/gal) Heat Test	Moisture Content	3.0 max %
Poured 400 kg/m³ (25 lb/ft³) Tapped 512 kg/m³ (32 lb/ft³) Specific Gravity 1.18 Acidity 0.03 wt % Ash Content 0.05 % Refractive Index 1.475 Dielectric Strength 787-984 kv/cm (2-2.5 kv/mil) Tukon Hardness 14 Knoops Wt/Vol (Cast Film) 1.18 kg/L (9.83 lb/gal) Heat Test Table 1.18 kg/L (9.83 lb/gal)	Tg ^b	96 °C
Tapped 512 kg/m³ (32 lb/ft³) Specific Gravity 1.18 Acidity 0.03 wt % Ash Content 0.05 % Refractive Index 1.475 Dielectric Strength 787-984 kv/cm (2-2.5 kv/mil) Tukon Hardness 14 Knoops Wt/Vol (Cast Film) 1.18 kg/L (9.83 lb/gal) Heat Test Table 1.18 kg/L (9.83 lb/gal)	Bulk Density	
Specific Gravity 1.18 Acidity 0.03 wt % Ash Content 0.05 % Refractive Index 1.475 Dielectric Strength 787-984 kv/cm (2-2.5 kv/mil) Tukon Hardness 14 Knoops Wt/Vol (Cast Film) Heat Test Teach in the street in the str	Poured	
Acidity as Acetic Acid	Tapped	512 kg/m ³ (32 lb/ft ³)
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 14 Knoops Wt/Vol (Cast Film) Heat Test The strength	Specific Gravity	1.18
Ash Content 0.05 % Refractive Index 1.475 Dielectric Strength 787-984 kv/cm (2-2.5 kv/mil) Tukon Hardness 14 Knoops Wt/Vol (Cast Film) 1.18 kg/L (9.83 lb/gal) Heat Test	Acidity	
Refractive Index	as Acetic Acid	0.03 wt %
Dielectric Strength Tukon Hardness Wt/Vol (Cast Film) Heat Test 787-984 kv/cm (2-2.5 kv/mil) 14 Knoops 14 Knoops 1.18 kg/L (9.83 lb/gal)	Ash Content	0.05 %
Tukon Hardness Wt/Vol (Cast Film) Heat Test 14 Knoops 1.18 kg/L (9.83 lb/gal)	Refractive Index	1.475
Wt/Vol (Cast Film) 1.18 kg/L (9.83 lb/gal) Heat Test	Dielectric Strength	787-984 kv/cm (2-2.5 kv/mil)
(Cast Film) 1.18 kg/L (9.83 lb/gal) Heat Test	Tukon Hardness	14 Knoops
Heat Test	Wt/Vol	
— ·	(Cast Film)	1.18 kg/L (9.83 lb/gal)
@ 160°C for 8 hr Tan melt	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).

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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^bGlass Transition Temperature