

# Cellulose Acetate Coil

**Formula:** CA

**Thickness:** 0.1mm

**Coil Width:** 1350mm

**Length:** 0.1m

**Category:** Green Production

**Type:** Biodegradable

**Colour:** Clear

**CAS Number:** 9004-35-7

**UOM Code:** 108-028-74

**SKU:** 1000001839-group

**Product Code:** AC31-FM-000100

## Material Properties for Polymers

### Chemical Resistance

Element	Value
Acids - concentrated	Poor
Acids - dilute	Good-Poor
Alcohols	Fair-Poor
Alkalis	Poor
Aromatic hydrocarbons	Good-Poor
Greases and Oils	Good
Halogenated Hydrocarbons	Good-Poor
Halogens	Poor
Ketones	Poor

### Electrical Properties

Element	Value
Dielectric constant @ 1MHz	~5
Dissipation factor @ 1kHz	0.06
Dielectric strength( kV mm <sup>2</sup> )	11
Volume resistivity( Ohmcm )	5 x 10 <sup>12</sup>

### Physical Properties

<b>Element</b>	<b>Value</b>
Flammability	HB
Radiation resistance	Fair
Refractive index	1.49
Resistance to Ultra-violet	Fair
Limiting oxygen index( % )	19
Water absorption - over 24 hours( % )	1.9-7
Density( gcm <sup>3</sup> )	1.3

## **Mechanical Properties**

<b>Element</b>	<b>Value</b>
Hardness - Rockwell	34-125
Tensile modulus( GPa )	01-Apr
Izod impact strength( J m <sup>21</sup> )	100-450
Abrasive resistance - ASTM D1044( mg/1000 cycles )	65
Tensile strength( MPa )	12-110

## **Thermal Properties**

<b>Element</b>	<b>Value</b>
Heat-deflection temperature - 0.45MPa( C )	52-105
Heat-deflection temperature - 1.8MPa( C )	48-86
Lower working temperature( C )	-20
Upper working temperature( C )	55-95
Specific heat( J K <sup>1</sup> kg <sup>1</sup> )	1200-1900
Thermal conductivity( W m <sup>1</sup> K <sup>1</sup> )	0.16-0.36@23°C
Coefficient of thermal expansion( x10 <sup>??</sup> K <sup>1</sup> )	80-180