

Goodfellow Cellophane, Rayophane Regenerated Cellulose Fiber

Category: Polymer, Renewable/Recycled Polymer, Thermoplastic, Cellulosic

Material Notes:

All forms of cellulose degrade before they melt but natural cellulose can be regenerated by the xanthate process to manufacture fibres, commonly called rayon or viscose, and film, commonly called by its earliest brand name Cellophane®. The latter films are plasticised by glycols and water to overcome their brittleness and are transparent, colourless and of moderate crystallinity. They were very widely used for packaging but have been substantially replaced by synthetic thermoplastics, especially polypropylene. They have very high permeability to moisture and, especially when dry, very low permeability to permanent gases. Their moisture content varies greatly with their environment reaching approximately 50% at 100% relative humidity. Not surprisingly, this causes many of their properties to vary considerably - so summarised values must be treated with considerable caution. Information provided by Goodfellow.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Goodfellow-Cellophane-Rayophane-Regenerated-Cellulose-Fiber.php

Physical Properties	Metric	English	Comments
Density	1.50 - 1.55 g/cc	0.0542 - 0.0560 lb/in ³	
Water Absorption	50 %	50 %	

Mechanical Properties	Metric	English	Comments
Elongation at Break	20 - 40 %	20 - 40 %	
Tenacity	0.130 - 0.230 N/tex	1.47 - 2.61 g/denier	

Thermal Properties	Metric	English	Comments
CTE, linear	80.0 μm/m-°C	44.4 μin/in-°F	
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Specific Heat Capacity	1.40 J/g-°C	0.335 BTU/lb-°F	
Thermal Conductivity	0.0600 W/m-K	0.416 BTU-in/hr-ft ² -°F	
Oxygen Index	18%	18 %	

Optical Properties	Metric	English	Comments
Transmission, Visible	90 %	90 %	transparent; thickness not quantified

Electrical Properties	Metric	English	Comments
Electrical Resistivity	1.00e+10 - 1.00e+12 ohm-cm	1.00e+10 - 1.00e+12 ohm-cm	
Dielectric Constant	4.0	4.0	Dry



Electrical Properties	Metric 0.0 kV/mm	English_70 kV/in	Comments
Dielectric Strength	@Thickness 1.00 mm	@Thickness 0.0394 in	bulk
Dissipation Factor	0.060	0.060	
	@Frequency 1000 Hz	@Frequency 1000 Hz	

Descriptive Properties	Value	Comments
Chemical Resistance - Alkalis	Good	
Chemical Resistance - Dilute Acids	Good	
Chemical Resistance - Greases and Oils	Good	
Radiation Resistance	Fair	

Contact Songhan Plastic Technology Co.,Ltd.

Website: www.lookpolymers.com Email: sales@lookpolymers.com

Tel: +86 021-51131842 Mobile: +86 13061808058

Skype: lookpolymers

Address: United North Road 215, Fengxian District, Shanghai City, China