

## Eastman Sahara Film

Category : Polymer , Film , Thermoplastic

**Material Notes:**

Sahara Films are developed for use in applications where increased temperature resistance is desired. Applications/Uses High temperature printable films

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Eastman-Sahara-Film.php](http://www.lookpolymers.com/polymer_Eastman-Sahara-Film.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.22 g/cc	1.22 g/cc	ASTM D792
Water Vapor Transmission	8.00 g/m <sup>2</sup> /day	0.515 g/100 in <sup>2</sup> /day	ASTM F372
Oxygen Transmission	18.0 cc-mm/m <sup>2</sup> -24hr-atm	45.7 cc-mil/100 in <sup>2</sup> -24hr-atm	ASTM D3985
Carbon Dioxide Transmission	87.0 cc-mm/m <sup>2</sup> -24hr-atm	221 cc-mil/100 in <sup>2</sup> -24hr-atm	ASTM D1434
Thickness	250 microns	9.84 mil	ASTM D374

Mechanical Properties	Metric	English	Comments
Film Tensile Strength at Yield, MD	54.0 MPa	7830 psi	ASTM D882
Film Tensile Strength at Yield, TD	52.0 MPa	7540 psi	ASTM D882
Film Elongation at Break, MD	150 %	150 %	ASTM D882
Film Elongation at Break, TD	130 %	130 %	ASTM D882
Film Elongation at Yield, MD	6.0 %	6.0 %	ASTM D882
Film Elongation at Yield, TD	6.0 %	6.0 %	ASTM D882
Tensile Modulus	1.90 GPa	276 ksi	Tangent, MD; ASTM D882
Secant Modulus, MD	1.80 GPa	261 ksi	0.01; ASTM D882
Tear Strength, Total	3.90 N	0.877 lb (f)	Split Tear Method, 254mm/min, MD; ASTM D1938
	4.10 N	0.922 lb (f)	Split Tear Method, 254mm/min, TD; ASTM D1938
	42.0 N	9.44 lb (f)	90° Tear Resistance, MD; ASTM D1004
	43.0 N	9.67 lb (f)	90° Tear Resistance, TD; ASTM D1004
Elmendorf Tear Strength, MD	2.68 g/micron	68.1 g/mil	ASTM D1922

Mechanical Properties <sub>h, TD</sub>	Metric <sub>micron</sub>	English <sub>mil</sub>	Comments <sub>2</sub>
Dart Drop	2.38 g/micron	60.5 g/mil	ASTM D1709A
Film Tensile Strength at Break, MD	49.0 MPa	7110 psi	ASTM D882
Film Tensile Strength at Break, TD	44.0 MPa	6380 psi	ASTM D882

Thermal Properties	Metric	English	Comments
Glass Transition Temp, Tg	100 °C	212 °F	DSC

Optical Properties	Metric	English	Comments
Refractive Index	1.566	1.566	n <sub>D</sub> ; ASTM D542
Haze	<= 1.0 %	<= 1.0 %	ASTM D1003
Gloss	106 %	106 %	at 60°; ASTM D2457
Yellow Index	0.63 %	0.63 %	ASTM D2244
Transmission, Visible	90 %	90 %	Regular Transmittance; ASTM D1003
	92 %	92 %	Total Transmittance; ASTM D1003
	100 %	100 %	Transparency; ASTM D1746

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+17 ohm-cm	1.00e+17 ohm-cm	ASTM D257
Surface Resistivity per Square	1.00e+16 ohm	1.00e+16 ohm	ASTM D257
Dielectric Constant	2.34	2.34	ASTM D150
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
	2.46	2.46	ASTM D150
	@Frequency 1000 Hz	@Frequency 1000 Hz	
Dielectric Strength	50.0 kV/mm	1270 kV/in	Short Time, 500V/sec; ASTM D149
Dissipation Factor	0.0050	0.0050	ASTM D150
	@Frequency 1000 Hz	@Frequency 1000 Hz	
	0.014	0.014	ASTM D150
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	

Descriptive Properties	Value	Comments
------------------------	-------	----------

Descriptive Properties	Value	Comments
Color, CIE b*	0.34	VGAS-A-AN-G-RS-001
Color, CIE L*	96.14	VGAS-A-AN-G-RS-001
Whiteness Index, ASTM D2244	88.82	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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