

Properties - Tyvek® Web

STERIS uses highest quality uncoated Tyvek® web (1073B) for Sterilization rolls made of DuPont™ Tyvek®. Tyvek® is in compliance to requirements defined by European Standard EN 868-9 and all requirements listed in below table are fulfilled at any time.

Properties	Unit	Related Standard	Typical Values
Substance	g/m ²	EN ISO 536	74.65
Delamination	N	ASTM D2724	(1.8-3.6)
Thickness	µm	ASTM D645	Min. 175
Elmendorf Tear /MD	mN	DIN EN 21974 / ISO 1974:2012	3425
Elmendorf Tear /CD	mN	DIN EN 21974 / ISO 1974:2012	3515
Tensile Strength /MD	N/2.54cm	DIN EN ISO 1924-2	193
Tensile Strength /CD	N/2.54cm	DIN EN ISO 1924-2	208
Elongation /MD	%	DIN EN ISO 1924-2	22
Elongation /CD	%	DIN EN ISO 1924-2	26
Bendsten Air Permeability	ml/min	ISO 5636-3	609
Opacity	%	ISO 2471	92
Microbial Barrier	Log Reduction Value (LRV)	ASTM F1608	>4
Mullen Burst	kPa	ISO 2758	1227
Spencer Puncture	J/m ²	ASTM D3420	7488
FREE FROM LEAD AND HEAVY METALS AND TOXIC MATERIALS			

Properties | Laminated Film (PET/PE)

The film web is in compliance to requirements defined by European Standard EN 868-5 and all requirements listed in below table are fulfilled at any time.

Properties	Unit	Method	Typical Value	
Thickness	µm	ASTM F2251-03	Lam. Film	Min. 55

Properties	Unit		Method	Typical Value	
				Before Sterilisation	After Sterilisation
Tensile	N	MD	ASTM D882-12	Min.26	Min.26
		CD		Min.26	Min.26
Elongation	%	MD	ASTM D882-12	Min.28	Min.28
		CD		Min.30	Min.30
Tear Resistance	mN	MD	ASTM D1922-09	Min.90	Min.90
		CD		Min.90	Min.90
Falling Dart	gr		ASTM D1709	Max.325	Max.325
Pinhole Control	-		TS EN 8685 Annex C	None	None
Haze	%		ASTM D 1003	Max.17	Max.17
Light Transmission	%		ASTM D 1003	≥75	≥75
FREE FROM LEAD, HEAVY METALS AND TOXIC MATERIALS					

Product Specifications

All final products are tested for compliance with ISO 11607-1, ISO 11140-1 and EN 868-5.

	Property	Unit	Method	Typical Value		
				Before Sterilization		
FINAL PRODUCT	Seal Strength	Size (cm)	ASTM F88 / F88M-09	<25	≥25	-
		Edge Seals (N/15mm)		3.0 ± 0.5	4.0 ± 0.75	-
		Top Seals (N/15mm)		4.0 ± 0.5	5.0 ± 0.5	-
	Bubble Test	-	ASTM F2096-2011	No bubbles		No bubbles
	Dimension Control	mm	ASTM F2203-13	Correct Dimensions		Correct Dimensions
	Dye Penetration	-	ASTM F1929-15	No Leakages		No Leakages
	Peel Direction	-	EN 868-5 Annex E	No Particles		No Particles
	Indicator Control	-	ISO 11140-1	Colour change to reference colour		Colour change to reference colour

INDICATOR	Sterilization Method	Colour Before Exposure	Colour After Exposure
		VH2O2	Yellow

SEAL	Properties	Unit	Range
		Suggested Sealing Temperature	°C