

Optima Spring Formula™

Unbleached kraft paper

Issued: 01.2026

Replaces: 03.2025

Technical specification, typical & minimum values

Property	Unit						Standard
Grammage	g/m ²		130 ± 3.5	140 ± 3.5	145 ± 4.0	155 ± 4.0	ISO 536
Tensile strength MD	kN/m	typ	12.5	14.3	14.8	15.5	ISO 1924-3
Tensile strength MD	kN/m	min	12.0	13.0	13.3	13.5	ISO 1924-3
Tensile strength CD	kN/m	typ	5.4	5.6	5.8	6.5	ISO 1924-3
Tensile strength CD	kN/m	min	5.0	5.2	5.4	5.8	ISO 1924-3
Strain at break MD	%	typ	10.5	11.5	11.6	11.6	ISO 1924-3
Strain at break MD	%	min	9.0	10.5	10.6	10.8	ISO 1924-3
Strain at break CD	%	typ	8.5	8.5	8.5	8.5	ISO 1924-3
Strain at break CD	%	min	8.0	8.0	8.0	8.0	ISO 1924-3
Tensile Energy Absorption (TEA) index MD	J/g	typ	690	750	760	800	ISO 1924-3
Tensile Energy Absorption (TEA) index MD	J/g	min	620	700	710	780	ISO 1924-3
Tensile Energy Absorption (TEA) index CD	J/g	typ	350	360	370	420	ISO 1924-3
Tensile Energy Absorption (TEA) index CD	J/g	min	310	330	340	370	ISO 1924-3
Tear index MD	mNm ² /g	typ	13	14	14	14	ISO 1974
Tear index MD	mNm ² /g	min	12	13	13	13	ISO 1974
Tear index CD	mNm ² /g	typ	19	20	21	21	ISO 1974
Tear index CD	mNm ² /g	min	17	18	19	19	ISO 1974
Cobb ₆₀	g/m ²	max	32				ISO 535
Moisture	%		7.5 ± 1.5				ISO 287

Laboratory test climate 23 °C/50 % RH (according to ISO 187). Minimum values are guaranteed.

MD=machine direction, CD=cross direction.

Reel diameter: 80 cm. Tolerance of reel width is ± 2 mm. Diameter of core 7.6 cm ± 1 mm.

Other diameters and cores are possible in cases of full trim of the machine deckle.

Producing mill: Ostroleka, Poland

Certificates

PEFC Chain of Custody: INS-PEFC-COC-208949

FSC Chain of Custody: FSC® -C127282

Occupational health and safety ISO 45001

Food safety ISO 22000

Environmental management ISO 14001

Quality management ISO 9001

Stora Enso is committed to continuously optimize quality for the evolving needs of end users. Our products' specifications are reviewed, and if necessary, updated to reflect quality development. Please check the latest version from Stora Enso web site.

Ideal storage conditions: 23 °C / 50 % RH

Paper should be stored in a dry, covered and ventilated warehouse. It is recommended that prior to use in production, paper should be stored some time in conditions similar to the conditions in the production hall. The required storage period depends mainly on the volume of paper reel, as well as the temperature difference between the warehouse and production hall.

