



STANDARD TECHNICAL CONDITIONS

Optima HP Evo

high porosity sack kraft paper

TD-CZOO-18-05-15-P

Technical specification.

Parameter			UNIT	PARAMETER VALUE	Test Method
Basis weight			g/m ²	110	PN-ISO 536
Tolerance			g/m ²	+3 -2	
Tensile index	MD	typical min	Nm/g	78 66	ISO 1924-3
	CD	typical min		52 42	
Tensile strength	MD	typical min	kN/m	8,6 7,3	
	CD	typical min		5,7 4,6	
Strain at break	MD	typical min	%	10,5 9,2	
	CD	typical min		7,8 6,6	
Tensile Energy Absorption –TEA index	MD	typical min	J/g	4,4 3,7	
	CD	typical min		2,6 2,4	
Tensile Energy Absorption –TEA	MD	typical min	J/m ²	480 410	
	CD	typical min		280 260	
Air permeability Gurley		max	s	9,0	PN-92/P-50176/05 (idt. ISO 5636-5)
Water absorption- Cobb 60		max	g/m ²	32	PN-EN 20535 PN-ISO 535
Moisture			%	7,5±1,5	PN- EN ISO 287

Measure conditions: relative moisture 50 ± 2% ; temperature 23 ± 1°C (PN-EN 20187)
Minimal values are guaranteed.

Technical information

1. Number of breaks in a reel: max 3. All breaks stuck and marked on the head of reel in red.
2. Diameter of reels: min 80 cm, max 125 cm.
3. Cutting tolerance ± 2 mm.
4. Core diameter: 7.6 cm ± 1 mm or 7.0 cm ± 1 mm.
5. Cores are secured with plugs.
6. Reels are not wrapped. Six outer layers make a wrapping of a reel. Other kinds of packing available.
7. Standard marking of reel:
 - two labels on the horizontal surface
 - the number of reel on the reel head
8. Recommendations regarding paper storage:

Paper should be stored in a dry, roofed and airy store. Before used in production, it needs to be left in conditions similar to those of its converting process for some time. This period depends on the paper reel volume and difference of temperatures between the production hall and the store. So, if a paper reel has a volume of over 1,5m³ ($\phi > 1$ m, L > 2m) and difference between temperatures amounts to over 30 °C, the storage time should be ca 5 days. Smaller volumes of paper reels and lower differences of temperatures require a shorter storage period. Compliance with the above conditions will significantly improve paper convertibility.
9. Production of **OPTIMA HP Evo** is certified in accordance with ISO 9001 quality management system, 14001 environmental management system and OHSAS 18001 safety management system.
10. Above specification TD-CKOOO-18-05-15-P is valid from 01.09.2015 until the next one is issued. It replaces TD-CZOO-18-04-13-P.
11. Other than mentioned above parameters and technical information to be agreed separately.



Stora Enso Poland S.A.
I Armii Wojska Polskiego 21
07-401 Ostrołęka, Poland
Tel. +4829 7640000
Fax +4829 7640002
www.storaenso.com

NIP 758-00-00-692
REGON 550412627