

# KARTONSAN PRODUCT SPECIFICATION

## GT1: LUXTRIPLEX CARDBOARD

Luxtriplex is the premium grade with high smoothness & stiffness, consisting of recycled fiber amount around 96-98% Both sides are coated where back side is also white. Luxtriplex grade has excellent printing, box manufacture as well as filling runnability.

Taber 15				
Grammage	Caliper	MD Stiffness	CD Stiffness	Avg. Stiffness**
225	245	5,1	2,8	3,8
250	285	7,0	3,9	5,2
280	330	9,6	5,1	7,0
300	360	11,5	6,5	8,7
350	425	17,8	9,3	12,9
400	495	24,7	13,2	18,1
450	575	35,8	18,0	25,4

## GD2: EXPRINT CARDBOARD

Exprint is the premium grade with high smoothness & stiffness, consisting of recycled fiber amount around 96-98% Both sides are coated where back side is grey. Exprint grade has excellent printing, box manufacture as well as filling runnability.

Taber 15				
Grammage	Caliper	MD Stiffness	CD Stiffness	Avg. Stiffness**
225	265	5,1	2,9	3,9
250	305	7,2	4,0	5,4
280	350	10,2	5,3	7,4
300	380	12,0	6,6	8,9
350	450	18,7	10,2	13,8
400	540	27,1	13,5	19,1
450	615	38,4	18,4	26,6

## GD3: NORMPRINT CARDBOARD

Normprint cardboard has coating at the top layer. Back side is grey. Its produced from 100% recycled paper. Normprint grade has excellent printing, box manufacture as well as filling runnability.

Taber 15				
Grammage	Caliper	MD Stiffness	CD Stiffness	Avg. Stiffness**
280	350	8,5	3,8	5,7
300	375	11,0	5,0	7,4
320	405	13,8	5,6	8,8
350	450	18,0	7,2	11,4
400	530	25,2	9,6	15,6
450	600	35,0	13,8	22,0
500	650	42,0	16,8	26,6

## NORMPRINT - LINER CARDBOARD

Normprint Liner cardboard has coating at the top layer, back side is grey and produced from 100% recycled paper. Normprint Liner grade has excellent lamination, printing, box manufacture, and filling runnability.

Grammage	Caliper	SCT (cd)	Burst
200	235	3,0	360
225	265	3,2	400

	Luxtriplex	Exprint	Normprint	Normprint - Liner
Brightness	82	82	78	80
Brightness - Back Side	69	-	-	-
PPS	2,0	2,0	2,5	2

Parameter	Grammage	Caliper	Stiffness	Brightness (Elrepho)	PPS	Burst	SCT - cd
Unit	gr/m <sup>2</sup>	µm	mNm	%	µm	kPa	kNm
Tolerance	± 3%	± 5%	-15%	-1% -2% (Back Side)	+ 0,5	-10%	-0,3
Testing Method	ISO 536	ISO 534	ISO 2493	ISO 2470	ISO 8791-4	ISO 2759	ISO 9895

\* Conditioning: T= 23 ± 1 °C and RH= 50 ± 3%

\*\* Geometric Average stiffness:

-- calculated by:  $\sqrt{(\text{MD Stiffness}) \cdot (\text{CD Stiffness})}$

-- considered for the evaluation of single sample