

LINK TO PRODUCT PAGE

EXTRAROUGH / EXTRAROUGH REC		Coldwhite	White	Warmwhite	RECYCLING White	
EXTRASMOOTH / EXTRASMOOTH REC		Coldwhite	White	Warmwhite	RECYCLING White	
ROUGH DELUXE		White-Warmwhite				
ROUGH		Coldwhite	White	Warmwhite		
SMOOTH		Coldwhite	White	Warmwhite		
EXTRAMATT REC		Coldwhite-White				
EMBOSSSED	LEATHER	Coldwhite	White	Warmwhite		
	LINEN	Coldwhite	White	Warmwhite		
	MICRO	Coldwhite	White	Warmwhite		
	STONE	Coldwhite	White	Warmwhite		
PURE COTTON			White	Warmwhite		
NATURAL				Warmwhite		
NEWSPRINT / ZEITUNGSPAPIER			White			
HAFTPAPIER / ETIKETTEN	SMOOTH EXTRAROUGH	Coldwhite	White White	Warmwhite		
PHOTO			White			
ECO FIBRES		Jute Black	Straw Black & White	Birch Hemp Fibre White	Bagasse de Colombia	
ROUGH 5% COLOR + 95% WHITE		Rosewhite	Greenwhite	Bluewhite	Greywhite	
PACKAGING / COLORS		Anthracite Green Tea State Grey	Anarchy Red Midnight Blue Violet	Arctic blue Mystic green Yellow	Dark Green Orange	Deep Blue Powder Rose
MULTILOFT / MULTILOFT REC	COVER	Coldwhite	White	Warmwhite	Recycling White	
		Earth	Black	Magnet		
	TOP INSERTS	Coldwhite	White	Photo		
		Red	Dark Green	Warmwhite	Black	Earth
		Yellow	Orange	Light green	Turquoise	Purple
				Magenta	Pink	Blue

EXTRAROUGH Coldwhite Datasheet

Envelopes available: C6; DL; C5; C4

Grammage	ISO 536	g/m2	105	120	150	175	270	350 *	430 *
Grain direction (source format)	102 x 72		LG/SG	LG/SG	LG/SG	LG/SG	SG	SG	SG
Thickness	ISO 534	µm	136,5	156	195	227,5	351	455	559
Bulk	ISO 534	cm3/g	1,3	1,3	1,3	1,3	1,3	1,3	1,3
Roughness Bendtsen	ISO 8791-2	ml/min	837	837	837	837	837	837	837
Smoothness Sheffield	ISO 8791-3	s	290	290	290	290	290	290	290
Brightness	ISO 2471 (D65)	%							
Opacity	ISO 2471	%	93	94	96	97	98	99	99,5
Whiteness	ISO 11475	%	160	160	160	160	160	160	160
Indigo			certified						
Additional print processes			Toner, Riso (up to 270gsm), Letterpress (from 270gsm onwards), Offset						
Suitable for preprint			yes	yes	yes				

Tolerances ±

Grammage	ISO 536	g/m2	3	3	4	4	7	8	8
Thickness	ISO 534	µm	3	3	3	5	7	8	8
Bulk	ISO 534	cm3/g							
Roughness Bendtsen	ISO 8791-2	ml/min	100	100	100	100	100	100	100
Smoothness Sheffield	ISO 8791-3	s	50	50	50	50	50	50	50
Brightness	ISO 2471 (D65)	%							
Opacity	ISO 2471	%							
Whiteness	ISO 11475	%	3	3	3	3	3	3	3

GREEN RESPONSIBILITY

FSC Mix: SGSCH-COC-009212

* laminated

Production: acid free, formaldehyde free
100% regenerative energy (wind), CO2 neutral
vegan

EXTRAROUGH White Datasheet

Envelopes available: C6; B6; DL; C5; C4; 17x17

Labels (50x70) available

Grammage	ISO 536	g/m2	105	120	150	175	270	324	350 *	430 *
Grain direction (source format)	102 x 72		SG/SG	LG/SG	LG/SG	LG/SG	LG/SG	LG **	SG	SG
Thickness	ISO 534	µm	136,5	156	195	227,5	351	421	455	559
Bulk	ISO 534	cm3/g	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1,3
Roughness Bendtsen	ISO 8791-2	ml/min	837	837	837	837	837	837	837	837
Smoothness Sheffield	ISO 8791-3	s	290	290	290	290	290	290	290	290
Brightness	ISO 2471 (D65)	%								
Opacity	ISO 2471	%	94	95	96	97	98	99,5	99	99,5
Whiteness	ISO 11475	%	145	145	145	145	145	145	145	145
Indigo			certified							
Additional print processes			Toner, Riso (up to 270gsm), Letterpress (from 270gsm onwards), Offset							
Suitable for preprint			yes	yes	yes					

Tolerances ±

Grammage	ISO 536	g/m2	3	3	4	4	7	7	8	8
Thickness	ISO 534	µm	3	3	3	5	7	7	8	8
Bulk	ISO 534	cm3/g								
Roughness Bendtsen	ISO 8791-2	ml/min	100	100	100	100	100	100	100	100
Smoothness Sheffield	ISO 8791-3	s	50	50	50	50	50	50	50	50
Brightness	ISO 2471 (D65)	%								
Opacity	ISO 2471	%								
Whiteness	ISO 11475	%	3	3	3	3	3	3	3	3

GREEN RESPONSIBILITY

FSC Mix: SGSCH-COC-009212

Production: acid free, formaldehyde free
100% regenerative energy (wind), CO2 neutral
vegan

Fresh fiber: 71 - 75% (rest: filling materials, sizing, moisture)

* laminated

** source format
527 x 748

EXTRAROUGH RECYCLING White Datasheet

Envelopes available: DL; C5; C4
EXTRAROUGH Labels (50x70) available

Grammage	ISO 536	g/m2	105	120	150	175	270	350 *
Grain direction (source format)			LG/SG	LG/SG	LG/SG	SG	SG	SG
Thickness	ISO 534	µm	136,5	156	195	227,5	351	455
Bulk	ISO 534	cm3/g	1,3	1,3	1,3	1,3	1,3	1,3
Roughness Bendtsen	ISO 8791-2	ml/min	837	837	837	837	837	837
Smoothness Sheffield	ISO 8791-3	s	260	260	260	290	290	290
Brightness	ISO 2471 (D65)	%						
Opacity	ISO 2471	%	96	97	97	98	99	99
Whiteness	ISO 11475	%	134	134	134	134	134	134
Indigo			certified					
Additional print processes			Toner, Riso (up to 270gsm), Letterpress (from 270gsm onwards), Offset					
Suitable for preprint			yes	yes	yes			

Tolerances ±

Grammage	ISO 536	g/m2	3	3	4	4	7	8
Thickness	ISO 534	µm	3	3	3	5	7	8
Bulk	ISO 534	cm3/g						
Roughness Bendtsen	ISO 8791-2	ml/min	100	100	100	100	100	100
Smoothness Sheffield	ISO 8791-3	s	50	50	50	50	50	50
Brightness	ISO 2471 (D65)	%						
Opacity	ISO 2471	%						
Whiteness	ISO 11475	%	3	3	3	3	3	3

GREEN RESPONSIBILITY

FSC Recycled: SGSCH-COC-009212

* laminated

100% Post Consumer Waste

Production: acid free, formaldehyde free, without optical brighteners

100% regenerative energy (wind), CO2 neutral

vegan

EXTRAROUGH Warmwhite Datasheet

Envelopes available: C6; B6; DL; C5; C4; 17x17

Grammage	ISO 536	g/m2	105	120	150	175	270	324	350 *	430 *
Grain direction (source format)	102 x 72		LG/SG	LG/SG	LG/SG	LG/SG	SG	LG **	SG	SG
Thickness	ISO 534	µm	136,5	156	195	227,5	351	421	455	559
Bulk	ISO 534	cm3/g	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1,3
Roughness Bendtsen	ISO 8791-2	ml/min	837	837	837	837	837	837	837	837
Smoothness Sheffield	ISO 8791-3	s	290	290	290	290	290	290	290	290
Brightness	ISO 2471 (D65)	%								
Opacity	ISO 2471	%	94	95	96	97	98	99,5	99	99,5
Whiteness	ISO 11475	%	78	78	78	78	78	78	78	78
Indigo			certified							
Additional print processes			Toner, Riso (up to 270gsm), Letterpress (from 270gsm onwards), Offset							
Suitable for preprint			yes	yes	yes					

Tolerances ±

Grammage	ISO 536	g/m2	3	3	4	4	7	7	8	8
Thickness	ISO 534	µm	3	3	3	5	7	7	8	8
Bulk	ISO 534	cm3/g								
Roughness Bendtsen	ISO 8791-2	ml/min	100	100	100	100	100	100	100	100
Smoothness Sheffield	ISO 8791-3	s	50	50	50	50	50	50	50	50
Brightness	ISO 2471 (D65)	%								
Opacity	ISO 2471	%								
Whiteness	ISO 11475	%	3	3	3	3	3	3	3	3

GREEN RESPONSIBILITY

FSC Mix: SGSCH-COC-009212

Production: acid free, formaldehyde free, without optical brighteners
100% regenerative energy (wind), CO2 neutral
vegan

* laminated

** source format
527 x 748

EXTRASMOOTH Coldwhite Datasheet

SMOOTH Envelopes available: C6; DL; C5; C4

SMOOTH Labels (50x70) available

Grammage	ISO 536	g/m2	105	120	150	175	270	350 *	430 *
Grain direction (source format)	102 x 72		LG	LG/SG	LG/SG	LG/SG	SG	SG	SG
Thickness	ISO 534	µm	115,5	132	165	192,5	297	385	473
Bulk	ISO 534	cm3/g	1,1	1,1	1,1	1,1	1,1	1,1	1,1
Roughness Bendtsen	ISO 8791-2	ml/min	125	125	125	125	125	125	125
Smoothness Sheffield	ISO 8791-3	s	110	110	110	110	110	110	110
Brightness	ISO 2471 (D65)	%							
Opacity	ISO 2471	%	93	94	96	97	98	99	99,5
Whiteness	ISO 11475	%	160	160	160	160	160	160	160
Indigo			certified						
Additional print processes			Toner, Letterpress (from 270gsm onwards), Offset						
Suitable for preprint			yes	yes	yes				

Tolerances ±

Grammage	ISO 536	g/m2	3	3	4	4	7	8	8
Thickness	ISO 534	µm	3	3	5	5	7	8	9
Bulk	ISO 534	cm3/g							
Roughness Bendtsen	ISO 8791-2	ml/min	50	50	50	50	50	50	50
Smoothness Sheffield	ISO 8791-3	s	10	10	10	10	10	10	10
Brightness	ISO 2471 (D65)	%							
Opacity	ISO 2471	%							
Whiteness	ISO 11475	%	3	3	3	3	3	3	3

GREEN RESPONSIBILITY

FSC Mix: SGSCH-COC-009212

* laminated

Production: acid free, formaldehyde free
100% regenerative energy (wind), CO2 neutral
vegan

EXTRASMOOTH White Datasheet

SMOOTH Envelopes available: C6; DL; C5; C4

SMOOTH Labels (50x70) available

Grammage	ISO 536	g/m2	105	120	150	175	270	350 *	430 *
Grain direction (source format)	102 x 72		LG/SG	LG/SG	LG/SG	LG/SG	SG	SG	SG
Thickness	ISO 534	µm	115,5	132	165	192,5	297	385	473
Bulk	ISO 534	cm3/g	1,1	1,1	1,1	1,1	1,1	1,1	1,1
Roughness Bendtsen	ISO 8791-2	ml/min	125	125	125	125	125	125	125
Smoothness Sheffield	ISO 8791-3	s	110	110	110	110	110	110	110
Brightness	ISO 2471 (D65)	%							
Opacity	ISO 2471	%	94	95	96	97	98	99	99,5
Whiteness	ISO 11475	%	145	145	145	145	145	145	145
Indigo			certified						
Additional print processes			Toner, Letterpress (from 270gsm onwards), Offset						
Suitable for preprint			yes	yes	yes				

Tolerances ±

Grammage	ISO 536	g/m2	3	3	4	4	7	8	8
Thickness	ISO 534	µm	3	3	5	5	7	8	9
Bulk	ISO 534	cm3/g							
Roughness Bendtsen	ISO 8791-2	ml/min	50	50	50	50	50	50	50
Smoothness Sheffield	ISO 8791-3	s	10	10	10	10	10	10	10
Brightness	ISO 2471 (D65)	%							
Opacity	ISO 2471	%							
Whiteness	ISO 11475	%	3	3	3	3	3	3	3

GREEN RESPONSIBILITY

FSC Mix: SGSCH-COC-009212

* laminated

Production: acid free, formaldehyde free, without optical brighteners

100% regenerative energy (wind), CO2 neutral

vegan

EXTRASMOOTH RECYCLING White Datasheet

SMOOTH Envelopes available: C6; DL; C5; C4

SMOOTH Labels (50x70) available

Grammage	ISO 536	g/m2	105	120	150	270	350 *
Grain direction (source format)	102 x 72		LG	LG	LG	LG/SG **	SG
Thickness	ISO 534	µm	115,5	132	165	297	385
Bulk	ISO 534	cm3/g	1,1	1,1	1,1	1,1	1,1
Roughness Bendtsen	ISO 8791-2	ml/min	65	65	65		107
Smoothness Sheffield	ISO 8791-3	s	70	70	70	100	100
Brightness	ISO 2471 (D65)	%					
Opacity	ISO 2471	%	96	97	97	99,5	99,5
Whiteness	ISO 11475	%	134	134	134	134	134
Indigo			certified				
Additional print processes			Toner, Letterpress (from 350gsm onwards), Offset				
Suitable for preprint			oui	oui			

Tolerances ±

Grammage	ISO 536	g/m2	3	3	4	4	5
Thickness	ISO 534	µm	3	3	5	6	7
Bulk	ISO 534	cm3/g					
Roughness Bendtsen	ISO 8791-2	ml/min	20	20	20	20	20
Smoothness Sheffield	ISO 8791-3	s					
Brightness	ISO 2471 (D65)	%					
Opacity	ISO 2471	%					
Whiteness	ISO 11475	%	4	4	4	4	4

GREEN RESPONSIBILITY

FSC Recycled: SGSCH-COC-009212

100% Post Consumer Waste

Production: acid free, formaldehyde free, without optical brighteners

100% regenerative energy (wind), CO2 neutral

vegan

* laminated

** SG upon request

EXTRASMOOTH Warmwhite Datasheet

SMOOTH Envelopes available: C6; DL; C5; C4

SMOOTH Labels (50x70) available

Grammage	ISO 536	g/m2	105	120	150	175	270	350 *	430 *
Grain direction (source format)	102 x 72		LG	LG/SG	LG/SG	LG/SG	SG	SG	SG
Thickness	ISO 534	µm	115,5	132	165	192,5	297	385	473
Bulk	ISO 534	cm3/g	1,1	1,1	1,1	1,1	1,1	1,1	1,1
Roughness Bendtsen	ISO 8791-2	ml/min	125	125	125	125	125	125	125
Smoothness Sheffield	ISO 8791-3	s	110	110	110	110	110	110	110
Brightness	ISO 2471 (D65)	%							
Opacity	ISO 2471	%	94	95	96	97	98	99	99,5
Whiteness	ISO 11475	%	78	78	78	78	78	78	78
Indigo			certified						
Additional print processes			Toner, Letterpress (from 270gsm onwards), Offset						
Suitable for preprint			yes	yes	yes				

Tolerances ±

Grammage	ISO 536	g/m2	3	3	4	4	7	8	8
Thickness	ISO 534	µm	3	3	5	5	7	8	9
Bulk	ISO 534	cm3/g							
Roughness Bendtsen	ISO 8791-2	ml/min	50	50	50	50	50	50	50
Smoothness Sheffield	ISO 8791-3	s	10	10	10	10	10	10	10
Brightness	ISO 2471 (D65)	%							
Opacity	ISO 2471	%							
Whiteness	ISO 11475	%	3	3	3	3	3	3	3

GREEN RESPONSIBILITY

FSC Mix: SGSCH-COC-009212

* laminated

Production: acid free, formaldehyde free, without optical brighteners

100% regenerative energy (wind), CO2 neutral

vegan

ROUGH DELUXE White-Warmwhite Datasheet

Grammage	ISO 536	g/m2	122	300
Grain direction (source format)			78,8x109,1 LG	100x70 SG
Thickness	ISO 534	µm	150	390
Bulk	ISO 534	cm3/g	1,23	1,31
Roughness Bendtsen	ISO 8791-2	ml/min		
Smoothness Sheffield	ISO 5627	s		
Brightness	ISO 2471 (D65)	%		
Opacity	ISO 2471	%		
Whiteness	ISO 11475	%	120	118
Indigo			yes	yes
Scodix			yes	yes
Additional print processes			Toner, Letterpress (300g), Offset	
Suitable for preprint			yes	

Tolerances ±

Grammage	ISO 536	g/m2		
Thickness	ISO 534	µm		
Bulk	ISO 534	cm3/g		
Roughness Bendtsen	ISO 8791-2	ml/min		
Smoothness Sheffield	ISO 5627	s		
Brightness	ISO 2471 (D65)	%		
Opacity	ISO 2471	%		
Whiteness	ISO 11475	%	3	3

GREEN RESPONSIBILITY

FSC Mix: SGSCH-COC-009212

Recycling ratio: 30%

ROUGH Coldwhite Datasheet

EXTRAROUGH Envelopes available: C6; DL; C5; C4

Grammage	ISO 536	g/m2	90	100	120	150	240	300
Grain direction (source format)	102 x 72		LG/SG	LG	LG/SG	LG/SG	SG	SG
Thickness	ISO 534	µm	117	130	150	195	302	377
Bulk	ISO 534	cm3/g	1,3	1,3	1,25	1,3	1,25	1,25
Roughness Bendtsen	ISO 8791-2	ml/min	350	350	350	350	350	350
Smoothness Sheffield	ISO 5627	s						
Brightness	ISO 2471 (D65)	%	109	109	109	109	109	109
Opacity	ISO 2471	%	93.5	94.5	96.5	97.5	100	100
Whiteness	ISO 11475	%	157	157	157	157	157	157
Indigo			suitable					
Additional print processes			Toner, Riso, Letterpress (300gsm), Offset					
Suitable for preprint			yes	yes	yes	yes		

Tolerances ±

Grammage	ISO 536	g/m2	3	3	4	4	7	8
Thickness	ISO 534	µm	3	3	3	5	2	8
Bulk	ISO 534	cm3/g						
Roughness Bendtsen	ISO 8791-2	ml/min	100	100	100	100	100	100
Smoothness Sheffield	ISO 5627	s						
Brightness	ISO 2471 (D65)	%	1.5	1.5	1.5	1.5	1.5	1.5
Opacity	ISO 2471	%	1	1	1	1		
Whiteness	ISO 11475	%	3	3	3	3	3	3

GREEN RESPONSIBILITY

FSC Mix: SGSCH-COC-009212

Production: acid free
61% renewable energies
vegan

ROUGH White Datasheet

EXTRAROUGH Envelopes available: C6; B6; DL; C5; C4; 17x17
EXTRAROUGH Labels (50x70) available

Grammage	ISO 536	g/m2	90	100	120	160	240	300
Grain direction (source format)	102 x 72		LG/SG	LG/SG	LG/SG	LG/SG	SG	SG
Thickness	ISO 534	µm	125	138	168	208	328	423
Bulk	ISO 534	cm3/g	1.4	1.4	1.4	1,3	1.4	1.4
Roughness Bendtsen	ISO 8791-2	ml/min	300	300	300	300	300	300
Smoothness Sheffield	ISO 5627	s						
Brightness	ISO 2471 (D65)	%	110	110	110	96,5	110	110
Opacity	ISO 2471	%	90	91.5	94.5	97	99	100
Whiteness	ISO 11475	%	148	148	148	137,4	148	148
Indigo			suitable		certified	suitable	certified	certified
Additional print processes			Toner, Riso, Letterpress (300g), Offset					
Suitable for preprint			yes	yes	yes	yes		

Tolerances ±

Grammage	ISO 536	g/m2	3	4	4	4	5	8
Thickness	ISO 534	µm	3	4	4	2	7	8
Bulk	ISO 534	cm3/g						
Roughness Bendtsen	ISO 8791-2	ml/min	50	50	50	50	50	50
Smoothness Sheffield	ISO 5627	s						
Brightness	ISO 2471 (D65)	%	1.5	1.5	1.5	3	1.5	1.5
Opacity	ISO 2471	%	1	1	1	1	1	
Whiteness	ISO 11475	%	3	3	3	2	3	3

GREEN RESPONSIBILITY

FSC Mix: SGSCH-COC-009212
 Production: acid free, 61% renewable energies
 vegan
 food-safe
 CO2 (fossil): 454 kg / t

ROUGH Warmwhite Datasheet

EXTRAROUGH Envelopes available: C6; B6; DL; C5; C4; 17x17

Grammage	ISO 536	g/m ²	90	100	120	150	240	300
Grain direction (source format)	102 x 72		LG/SG	LG	LG/SG	LG/SG	SG	SG
Thickness	ISO 534	µm	117	128	153	202	290	388
Bulk	ISO 534	cm ³ /g	1,3	1,3	1,3	1,3	1,2	1,3
Roughness Bendtsen	ISO 8791-2	ml/min	200	200	200	200	200	180
Smoothness Sheffield	ISO 5627	s						
Brightness	ISO 2471 (D65)	%	89,5	89,5	89,5	89,5	89,5	89,5
Opacity	ISO 2471	%	87	88,5	91	93	96,5	97,5
Whiteness	ISO 11475	%	77,8	77,8	77,8	77,8	77,8	77,8
Indigo			possible					
Additional print processes			Toner, Riso (bis 240g), Letterpress (300g), Offset					
Suitable for preprint			yes	yes	yes	yes		

Tolerances ±

Grammage	ISO 536	g/m ²	3.5	4	4.5	5	5	10
Thickness	ISO 534	µm	4	4	5	5	7	10
Bulk	ISO 534	cm ³ /g						
Roughness Bendtsen	ISO 8791-2	ml/min	50	50	50	50	50	50
Smoothness Sheffield	ISO 5627	s						
Brightness	ISO 2471 (D65)	%	2	2	2	2	2	2
Opacity	ISO 2471	%	1	1	1	1	1	1
Whiteness	ISO 11475	%	2	2	2	2	2	2

GREEN RESPONSIBILITY

FSC Mix: SGSCH-COC-009212

Production: acid free, 61% renewable energies

vegan

food-safe

CO₂ (fossil): 565 kg / t

SMOOTH Coldwhite Datasheet

Envelopes available: C6; DL; C5; C4
Labels (50x70) available

Grammage	ISO 536	g/m2	100	120	150	240	300
Grain direction (source format)	102 x 72		LG	LG/SG	LG	SG	SG
Thickness	ISO 534	µm	115	134	170	272	336
Bulk	ISO 534	cm3/g	1.1	1.1	1.1	1.1	1.1
Roughness Bendtsen	ISO 8791-2	ml/min	130	130	130	130	130
Smoothness Sheffield	ISO 5627	s					
Brightness	ISO 2471 (D65)	%	109	109	109	109	109
Opacity	ISO 2471	%	94	96	97.5	100	100
Whiteness	ISO 11475	%	157	157	157	157	157
Indigo			suitable				
Additional print processes			Toner, Letterpress (300gsm), Offset				
Suitable for preprint			yes	yes	yes		

Tolerances ±

Grammage	ISO 536	g/m2	3	4	4	7	8
Thickness	ISO 534	µm	3	3	5	7	8
Bulk	ISO 534	cm3/g					
Roughness Bendtsen	ISO 8791-2	ml/min	50	50	50	50	50
Smoothness Sheffield	ISO 5627	s					
Brightness	ISO 2471 (D65)	%	1.5	1.5	1.5	1.5	1.5
Opacity	ISO 2471	%	1	1	1		
Whiteness	ISO 11475	%	3	3	3	3	3

GREEN RESPONSIBILITY

FSC Mix: SGSCH-COC-009212

Production: acid free, 61% renewable energies
vegan

Ageing resistant according to ISO 20494 and ISO 9706
food-safe

SMOOTH White Datasheet

Envelopes available: C6; DL; C5; C4
Labels (50x70) available

Grammage	ISO 536	g/m2	100	120	160	240	300
Grain direction (source format)	102 x 72		LG/SG	LG/SG	LG/SG	SG	SG
Thickness	ISO 534	µm	130	154	176	300	393
Bulk	ISO 534	cm3/g	1.3	1.3	1.2	1.2	1.3
Roughness Bendtsen	ISO 8791-2	ml/min	110	110	110	110	110
Smoothness Sheffield	ISO 5627	s					
Brightness	ISO 2471 (D65)	%	110	110	110	110	110
Opacity	ISO 2471	%	92.5	94	97	99	100
Whiteness	ISO 11475	%	148	148	148	148	148
Indigo			possible	suitable	possible	suitable	suitable
Additional print processes			Toner, Letterpress (300g), Offset				
Suitable for preprint			yes	yes	yes		

Tolerances ±

Grammage	ISO 536	g/m2	4	4	4	5	8
Thickness	ISO 534	µm	4	4	4	5	8
Bulk	ISO 534	cm3/g					
Roughness Bendtsen	ISO 8791-2	ml/min	50	50	50	50	50
Smoothness Sheffield	ISO 5627	s					
Brightness	ISO 2471 (D65)	%	1.5	1.5	1.5	1.5	1.5
Opacity	ISO 2471	%	1	1	1	1	
Whiteness	ISO 11475	%	3	3	3	3	3

GREEN RESPONSIBILITY

FSC Mix: SGSCH-COC-009212

Production: acid free, 61% renewable energies
vegan

Ageing resistant according to ISO 20494 and ISO 9706

food-safe

CO2 (fossil): 480 kg / t

SMOOTH Warmwhite Datasheet

Envelopes available: C6; DL; C5; C4
Labels (50x70) available

Grammage	ISO 536	g/m2	100	120	150	240	300
Grain direction (source format)	102 x 72		LG	LG	LG	SG	SG
Thickness	ISO 534	µm	130	154	195	307	372
Bulk	ISO 534	cm3/g	1.3	1.3	1.3	1.3	1.25
Roughness Bendtsen	ISO 8791-2	ml/min	110	110	110	110	110
Smoothness Sheffield	ISO 5627	s					
Brightness	ISO 2471 (D65)	%	89.5	89.5	89.5	89.5	89.5
Opacity	ISO 2471	%	88.5	91	93	96.5	97.5
Whiteness	ISO 11475	%	78	78	78	78	78
Indigo			possible				
Additional print processes			Toner, Letterpress (300g), Offset				
Suitable for preprint			yes	yes	yes		

Tolerances ±

Grammage	ISO 536	g/m2	3	3	5	5	8
Thickness	ISO 534	µm	3	4	5	6	8
Bulk	ISO 534	cm3/g					
Roughness Bendtsen	ISO 8791-2	ml/min	50	50	50	50	50
Smoothness Sheffield	ISO 5627	s					
Brightness	ISO 2471 (D65)	%	2	2	2	2	2
Opacity	ISO 2471	%	1	1	1	1	1
Whiteness	ISO 11475	%	2	2	2	2	2

GREEN RESPONSIBILITY

FSC Mix: SGSCH-COC-009212
 Production: acid free, 61% renewable energies
 vegan
 Ageing resistant according to ISO 20494 and ISO 9706
 food-safe
 CO2 (fossil): 562 kg / t

EXTRAMATT RECYCLING Coldwhite-White Datasheet

Grammage	ISO 536	g/m2	100	120	150	250	300
Grain direction (source format)	100 x 70		LG	LG/SG	LG/SG	SG	SG
Thickness	ISO 534	µm	121	140	175	279	338
Bulk	ISO 534	cm3/g	1,21	1,17	1,17	1,12	1,12
Roughness Bendtsen	ISO 8791-2	ml/min	160	160	160	160	160
Smoothness Bekk	ISO 5627	s					
Brightness	ISO 2471 (D65)	%					
Opacity	ISO 2471	%	96	98	>99	>99	>99
Whiteness	ISO 11475	%	134	134	134	134	134
Indigo			guaranteed				
Scodix			tested				
Additional print processes			Toner, Letterpress (300gsm), Offset				
Suitable for preprint			yes	yes	yes		

Tolerances ±

Grammage	ISO 536	g/m2					
Thickness	ISO 534	µm	+/-6	+/-7	+/-9	+/-14	+/-17
Bulk	ISO 534	cm3/g	+/-0,6	+/-0,6	+/-0,6	+/-0,6	+/-0,6
Roughness Bendtsen	ISO 8791-2	ml/min	+/-40	+/-40	+/-40	+/-40	+/-40
Smoothness Bekk	ISO 5627	s					
Brightness	ISO 2471 (D65)	%					
Opacity	ISO 2471	%	-2	-2	-2	-2	-2
Whiteness	ISO 11475	%	-4/+1	-4/+1	-4/+1	-4/+1	-4/+1

GREEN RESPONSIBILITY

FSC Recycled: SGSCH-COC-009212
blue Angel

EMBOSSSED Datasheet
Leather, Linen, Micro, Stone - one-sided embossing

Grammage	ISO 536	g/m2	300	Coldwhite	White	Warmwhite
Grain direction (source format)	100 x 72		SG			
Thickness	ISO 534	µm	375			
Bulk	ISO 534	cm3/g	1,2			
Roughness Bendtsen	ISO 8791-2	ml/min				
Smoothness Sheffield	ISO 8791-3	s				
Brightness	ISO 2471 (D65)	%				
Opacity	ISO 2471	%	97			
Whiteness	ISO 11475	%		162	148	120
Indigo			*			
Additional print processes			Toner, Letterpress, Offset			

Tolerances ±

Grammage	ISO 536	g/m2	7			
Thickness	ISO 534	µm	8			
Bulk	ISO 534	cm3/g				
Roughness Bendtsen	ISO 8791-2	ml/min				
Smoothness Sheffield	ISO 8791-3	s				
Brightness	ISO 2471	%				
Opacity	ISO 2471	%				
Whiteness	ISO 11475	%		3	3	3

GREEN RESPONSIBILITY

FSC Mix: SGSCH-COC-009212

* Raw material (before embossing) certified.
 adjustments required - depending on machine type,
 (lower temperature - in case of a 7s series:
 adjustments in transfer profile / contact pressure)
 Caution in solids (in particular with Micro).

PURE COTTON

Grammage	ISO 536	g/m2	350	710 *	350	710 *
Shade			White	White	Warmwhite	Warmwhite
Grain direction (source format)	70 x 100		LG	LG	LG	LG
Thickness	ISO 534	µm	560	1136	560	1136
Bulk	ISO 534	cm3/g	1,6	1,6	1,6	1,6
Roughness Bendtsen	ISO 8791-2	ml/min	1400	1400	1400	1400
Brightness	ISO 2471 (D65)	%	1,0	1,0	1,5	1,5
Opacity	ISO 2471	%				
Whiteness	ISO 11476	%	142	142	77	77
Indigo			no > Toner	no	no > Toner	no
Additional print processes		Toner (324gsm and 350gsm), Letterpress, Offset (only platen press)				

Tolerances ±

Grammage	ISO 536	g/m2	18	36	18	36
Thickness	ISO 534	µm	38	74	38	74
Bulk	ISO 534	cm3/g				
Roughness Bendtsen	ISO 8791-2	ml/min	250	250	250	250
Brightness	ISO 2471 (D65)	%				
Opacity	ISO 2471	%				
Whiteness	ISO 11475	%	3	3	3	3

GREEN RESPONSIBILITY

100% cotton

* laminated

very good resistance against climatic conditions: humidity, heat, cold

NATURAL Warmwhite Datasheet

Grammage	ISO 536	g/m2	330
Grain direction (source format)	100 x 70		SG
Thickness	ISO 534	µm	470
Bulk	ISO 534	cm3/g	1.42
Roughness Bendtsen	ISO 8791-2	ml/min	2500
Smoothness Sheffield	ISO 5627	s	
Brightness	ISO 2471 (D65)	%	
Opacity	ISO 2471	%	
Whiteness	ISO 11475	%	80
Indigo			suitable
Scodix			no
Additional print processes			Letterpress, Offset

Tolerances ±

Grammage	ISO 536	g/m2	15
Thickness	ISO 534	µm	25
Bulk	ISO 534	cm3/g	
Roughness Bendtsen	ISO 8791-2	ml/min	500
Smoothness Sheffield	ISO 5627	s	
Brightness	ISO 2471 (D65)	%	
Opacity	ISO 2471	%	
Whiteness	ISO 11475	%	

GREEN RESPONSIBILITY

FSC Mix: SGSCH-COC-009212

NEWSPRINT Datasheet

Grammage	ISO 536	g/m2	80
Grain direction (source format)	70 x 100		LG
Thickness	ISO 534	µm	90 - 100
Bulk	ISO 534	cm3/g	1,3
Roughness Bendtsen	ISO 8791-2	ml/min	
Smoothness Sheffield	ISO 8791-3	s	
Brightness	ISO 2471 (D65)	%	
Opacity	ISO 2471	%	98
Whiteness	ISO 11475	%	82
Indigo		suitable since lightly pigmented	
Additional print processes			Toner, Riso, Offset
Suitable for preprint			oui

Tolerances ±

Grammage	ISO 536	g/m2	2
Thickness	ISO 534	µm	
Bulk	ISO 534	cm3/g	
Roughness Bendtsen	ISO 8791-2	ml/min	
Smoothness Sheffield	ISO 8791-3	s	
Brightness	ISO 2471 (D65)	%	
Opacity	ISO 2471	%	
Whiteness	ISO 11475	%	

GREEN RESPONSIBILITY

FSC Mix: SGSCH-COC-009212

EU Ecolabel

63% recycled and 37% virgin fiber

ECF (elementary chlorine free)

lifespan class 6-40 (Durability of at least 50 years)

LABELS & STICKER Datasheet

Upper Material			smooth			extrarough
			Coldwhite	White	Warmwhite	White
Grammage	ISO 536	g/m2	90	90	90	120
Grain direction (source format)	50 x 70		LG	LG	LG	LG
Thickness (upper material)	ISO 534	µm	108	108	108	156
Thickness (Compound) - approx.		µm	190	190	190	243
Bulk (Obermaterial)	ISO 534	cm3/g	1,2	1,2	1,2	1,3
Roughness Bendtsen	ISO 8791-2	ml/min	120	120	120	837
Smoothness Sheffield	ISO 8791-3	s				290
Brightness	ISO 2471 (D65)	%				
Opacity	ISO 2471	%	92	92	92	95
Whiteness	ISO 11475	%	158	148	80	145
Indigo			suitable			certified
Additional print processes			Toner, Offset			Toner, Offset

GREEN RESPONSIBILITY

Upper material: FSC Mix: SGSCH-COC-009212 / in combination with the adhesive NOT certified!

Production: formaldehyde free, no heavy metals
vegan

Adhesive: permanently adherent, modified acrylate dispersion,
Durability: 4 years from the production date
(at 20+ Degree C and 50% rel. humidity)
Permitted for food packaging and direct contact with dry,
moist and fat-containing foods

Backing Paper: slitted

Adhesive: recyclable (PTS-RH 021:2012)

acid free, formaldehyde free,
without optical brighteners
vegan

permanently adherent,
modified Acrylic dispersion
good heat resistance
non-standard applications:
tests recommended

kraft, white, single-sided coated (86g)
currently unslit, will be slitted soon

PHOTO White Datasheet

Grammage	ISO 536	g/m ²	190
Grain direction (source format)	50 x 70		LG
Thickness	ISO 534	µm	184
Bulk	ISO 534	cm ³ /g	0,97
Roughness Bendtsen	ISO 8791-2	ml/min	
Smoothness Sheffield	ISO 8791-3	s	
Brightness	ISO 2471 (D65)	%	92
Opacity	ISO 22469	%	> 91
Whiteness	ISO 2469	%	> 140
Glanz	ISO 2813		30
Indigo			certified
Additional print processes			Toner (Ricoh)

Tolerances ±

Grammage	ISO 536	g/m ²	6
Thickness	ISO 534	µm	6
Bulk	ISO 534	cm ³ /g	
Roughness Bendtsen	ISO 8791-2	ml/min	
Smoothness Sheffield	ISO 8791-3	s	
Brightness	ISO 2471 (D65)	%	
Opacity	ISO 22469	%	
Whiteness	ISO 2469	%	
Glanz	ISO 2813		5

GREEN RESPONSIBILITY

FSC Mix: SGSCH-COC-009212

high ageing resistance (200+ years)

no stress whitening / fold break (even without lamination or grooving)

resistant to water, oil and dirt, removable with disinfectant

ecoFIBRES Datasheet

			Jute		Straw		Birch		Bagasse de Colombia	
			50% Rec. (kraft fiber)		50% Rec. (kraft fiber)		50% Rec. (kraft fiber)		100% sugar cane waste	
Grammage	ISO 536	g/m2	120	300	120	300	120	300	150	295
Grain direction (source format)	100 x 70		LG	SG	LG	SG	LG	SG	LG	LG
Thickness	ISO 534	µm	153	360	153	360	153	360	205	457
Bulk	ISO 534	cm3/g	1,3	1,2	1,3	1,2	1,3	1,2	1,35	1,55
Roughness Bendtsen	ISO 8791-2	ml/min								
Smoothness Sheffield	ISO 8791-3	s							170	200
Brightness	ISO 2471	%							40	40
Opacity	ISO 2471	%								
Indigo			guaranteed		guaranteed		guaranteed		no	
Additional print processes			Toner, Riso, Letterpress (300g), Offset							

			Black		Black & White	Hemp Fibre White
			100% mill waste		50% mill waste	30% hemp +30% post consumer waste
Grammage						
Grain direction (source format)						
Thickness	ISO 536	g/m2	150	300	300	324
Bulk	100 x 70		LG	SG	SG	LG (52,7 x 74,8)
Roughness Bendtsen	ISO 534	µm	200	360		457
Smoothness Sheffield	ISO 534	cm3/g	1,3	1,2	1,3	1,4
Brightness	ISO 8791-2	ml/min				
Opacity	ISO 8791-3	s				350
Indigo	ISO 2471	%				
Additional print processes	ISO 2471	%				98
			developed f. Indigo		developed f. Indigo	certified
			Toner, Riso, Letterpress (300g), Offset			

GREEN RESPONSIBILITY

Hemp Fibre White: FSC Mix: SGSCH-COC-009212

Jute, Straw, Birch: 50% recycled part made from carton fibers (+50% virgin fiber), hence NO FS

Bagasse: vegan, compostable, ideal for direct food contact

100% sugar cane waste - hence no FSC

ROUGH 5% COLOR + 95 % WHITE Datasheet

Greywhite, Greenwhite, Bluewhite, Rosewhite

Grammage	ISO 536	g/m2	100	140	350
Grain direction (source format)	70 x 100		LG	LG	SG
Thickness	ISO 534	µm	140	189	427
Bulk	ISO 534	cm3/g	1,4	1,4	1,2
Roughness Bendtsen	ISO 8791-2	ml/min			
Opacity	ISO 2471	%	92	96	99
Indigo			guaranteed		
Indigo		Toner, Riso (up to 140g), Letterpress (350g), Offset			
Additional print processes			yes	yes	

Tolerances ±

Grammage	ISO 536	g/m2			
Thickness	ISO 534	µm			
Bulk	ISO 534	cm3/g			
Roughness Bendtsen	ISO 8791-2	ml/min			
Smoothness Sheffield	ISO 5627	s			
Brightness	ISO 2471 (D65)	%			
Opacity	ISO 2471	%	2	2	0
Whiteness	ISO 11475	%			

GREEN RESPONSIBILITY

FSC Mix: SGSCH-COC-009212

PACKAGING / COLORS Datasheet

Grammage	ISO 536	g/m2	120	300		270
Grain direction (source format)	70 x 100		LG	LG	71,1 x 101,6	LG
Thickness	ISO 534	µm	175	440		361
Bulk	ISO 534	cm3/g	1,45	1,46		1,34
Roughness Bendtsen	ISO 8791-2	ml/min	1000	1150		
Smoothness Sheffield	ISO 8791-3	s				300
Opazität ISO	ISO 2471	%				
Indigo			certified			certified
Additional print processes		Toner, Riso (120g), Letterpress (300g), Offset				
Suitable for preprint			yes			

Color value:	C / M / Y / K
Anarchy red	30 / 100 / 80 / 0
Anthracite	60 / 20 / 5 / 80
Arctic Blue	30 / 5 / 5 / 20
Dark Green	100 / 40 / 70 / 70
Deep Blue	100 / 80 / 30 / 5
Green Tea	50 / 20 / 60 / 5
Midnight blue	100 / 80 / 30 / 60
Mystic Green	30 / 10 / 100 / 50
Orange	0 / 60 / 100 / 0
Powder Rose	0 / 30 / 20 / 10
State Grey	5 / 10 / 10 / 80
Violet	80 / 100 / 60 / 20
Yellow	5 / 20 / 100 / 0

GREEN RESPONSIBILITY	FSC Mix: SGSCH-COC-009212
	100% biodegradable and recyclable
	lifespan class (LC): over 100 years

MULTILOFT Datasheet

Surface	COVER		extrarough RECYCLING*	extrarough	extrarough	extrarough	extrarough	extrasmooth	Magnet
Shade	46 x 32		white	white	warmwhite	earth	black	coldwhite	
Grammage	ISO 536	g/m2	325	240	240	270	270	270	1350
Thickness	ISO 534	µm	419	356	356	305	305	305	530
Indigo			certified						
Additional print processes			Toner, Letterpress, Offset						

Surface	TOP		extrarough	Photo
Shade	46 x 32		white	white
Grammage	ISO 536	g/m2	150	190
Thickness	ISO 534	µm	201	184
Indigo			certified	
Additional print processes			Toner, Offset	X

INSERTS	C / M / Y / K	g/m2	µm
Coldwhite	2 / 0 / 0 / 0	325	406
White	0 / 0 / 0 / 0	325	406
Warmwhite	0 / 0 / 5 / 0	325	406
Black	0 / 0 / 0 / 100	270	356
Earth	0 / 80 / 60 / 0	270	356
Red	0 / 100 / 80 / 10	270	356
Dark Green	50 / 10 / 100 / 5	270	356
Light Green	30 / 0 / 40 / 0	270	356
Turquoise	50 / 0 / 20 / 0	270	356
Purple	40 / 60 / 0 / 0	270	356
Yellow	0 / 10 / 90 / 0	270	356
Orange	0 / 40 / 90 / 0	270	356
Magenta	0 / 100 / 0 / 0	270	356
Pink	0 / 40 / 5 / 0	270	356
Blue	100 / 30 / 0 / 10	270	356

MultiLoft is a unique, special application substrate, and as such, not subject to the same 1 cm or less sheet curl specification as non-treated sheets. Application of glues and/or coatings may lead to curling in excess of 1 cm, requiring the operator to apply back-curling massage of the stack prior to running through the press or printer.

Shelf life: dependent on environmental conditions
(temperature, humidity, etc.): 1.5 - 2.5 years
Sealing pressure: > 22 kg/cm²

GREEN RESPONSIBILITY

Cover coldwhite, white, warmwhite and Insert white:
FSC Mix: SGSCH-COC-009212
Cover/Insert earth, Cover/Insert Black and TOP extrarough and Photo:
source material is certified (before coating)

Adhesive completely chemical-free:
rubber-based and water-based
Multiloft is 100% recyclable