

## **UPM FINE**

The name says it all. UPM Fine. It provides high brightness, optimal opacity and outstanding suitability for processing. UPM Fine is a flexible multi-use paper. It's ideal grade for flyers, business reports, magazines and posters.

## **UPM FINE:**

Sheet fed offset papers					
Woodfree uncoated (WFU)					
Advertising material, Books, Business forms, Direct mailing, Magazines, Newspaper supplements, Posters					
Machine finished					
Hardwood and softwood sulphate pulp					
Sheet fed offset					
Sheets					
Strong kraft paper, Strong moisture proof polyethylene laminated kraft paper					
94/62 EC Heavy Metal Certificate, BfR Food Certificate, EMAS, EN 71/3:1988 D Safety of Toys, EU Ecolabel, FSC Chain-of-Custody, ISO 14001, ISO 50001, ISO 9001, OHSAS 18001, PEFC Chain-of-Custody, Permanent Paper ISO 9706					
FSC® and PEFC™ on request but subject to availability. Energy Management System ISO 50001 in place at Nordland Mill. We have changed into another measurement system, which causes changes in the technical target values. The change does not have any effect on product quality.					

## TECHNICAL TARGET VALUES

Basis Weight (ISO 536) (g/m²)	60.0	70.0	80.08	90.0	100.0	110.0	120.0	140.0	150.0	170.0	190.0	250.0	300.0	350.0
Thickness (ISO 534) (µm)	75.0	90.0	102.0	114.0	125.0	134.0	143.0	163.0	174.0	187.0	207.0	272.0	326.0	374.0
Bulk (ISO 534) (cm3/g)	1.25	1.28	1.28	1.27	1.25	1.22	1.19	1.16	1.16	1.10	1.10	1.09	1.09	1.07
Brightness D65 (ISO 2470-2) (%)	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0
CIE Whiteness (%)	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
L-value D65 (D65/10°) (ISO 5631-2)	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9
a-value D65 (D65/10°) (ISO 5631-2)	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
b-value D65 (D65/10°) (ISO 5631-2)	-14.0	-14.0	-14.0	-14.0	-14.0	-14.0	-14.0	-14.0	-14.0	-14.0	-14.0	-14.0	-14.0	-14.0
Opacity ISO (2471) (%)	87.0	90.0	92.5	94.5	95.5	96.5	97.0	98.0	98.5	99.0	99.5	99.7	99.9	99.9
Roughness Bendtsen (ISO 8791-2) (ml/min)	200.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0

## PREPRESS GUIDELINES

CIE L*-value (D50/2°) WB	93.7
CIE a*-value (D50/2°) WB	2.5
CIE b*-value (D50/2°) WB	-7.0
Max. Total Area (TAC%)	300
ICC Paper profile	PSO_Uncoated_ISO12647_eci.icc
Characterisation data	FOGRA47L.txt
TVI Curve	C(CMY), D(K)
AM Screen recommendation (I/cm)	60
ISO/ECI Profile (FM)	PSO_Uncoated_NPscreen_ISO12647_eci.icc
FOGRA Char. Data (FM)	FOGRA44L.txt
TVI Curve (FM)	F(CMYK)
FM Screen recommendation (μm)	30
Measurement condition for D50	ISO 13655, M0; D50/2°
Measurement equipment	Techkon RS800