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Conqueror Wove Brilliant White (ECF)

* High Sensitivity

= amendment + = addit	ion	X = deletion		
Substance g/m ²	80	90	100	
Caliper µm (approx)	105	125	135	
Opacity (ISO) %	84	90	91	
Brightness (ISO) % C	96	96	96	
Whiteness CIE D65	130	130	130	
Smoothness (Bendtsen) TS ml/min WS	150 200	150 200	150 200	
Rigidity (Taber) 15° MD mN m CD	0.25* 0.11*	0.36* 0.24*	0.47* 0.30*	
Surface pH	7.6	7.6	7.6	

Technical Information

Environmental Information

Constituents of Paper

Fibre Source – 20% cotton, 80% virgin wood fibre from sawmill residues, forest thinnings and sustainable forest in Spain, Canada, Sweden, Germany, Brazil, USA and Portugal. *Mill Broke* - All broke is recycled and can be as high as 20% of the total fibre content. *Filler* – approx 10 grammes.

BLEACHING

Pulps used in the production of the above grade are Elemental Chlorine Free (ECF) giving a resultant AOX level of <0.5kg per 1,000 kg of pulp.

DISPOSAL OF WASTE BY-PRODUCTS

Soil conditioner and a small amount to landfill.

PAPER MILL EFFLUENT

Water used is suitably treated and in most cases returned to source in a better condition than when removed, in accordance with strict local laws. Water is reused many times.

ENERGY SOURCE Gas, Oil, Electricity

TOTAL GROSS PRIMARY ENERGY (Paper Mill)

14 Giga Joules / 1,000 kg of paper.

This material is recyclable and bio-degradable.

This product meets ISO 9706 requirements for permanence of paper. This Mill has ISO 9002 Accreditation. : This Mill has ISO 14001 Accreditation. + $\rm X$

Technical Capability

Printing Process	Litho	
Screen Ruling	Up to 150	
Printing Inks	Conventional, UV and IR are preferred. High temperature resistant Fully Oxidizing ink for laser printing.	
Embossing	Yes	
Hot Foil Blocking	Yes – Laser grade foil available.	
Thermography	Yes	
Laser/Copier Guaranteed	Mono (desktop only)	
Inkjet Guaranteed	Mono	
Plain Paper Fax	Yes	
Permanence of Paper	Yes, ISO 9706	

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Conqueror Wove Diamond White (ECF) *

Technical Information

 $\sqrt{}$ = amendment

+ = addition

X = deletion

Substance g/m ²	100	300	
Caliper µm (approx)	135	350	
Opacity (ISO) %	94	-	
Brightness (ISO) % C	95	95	
Whiteness CIE D65	140	140	
Smoothness (Bendtsen) TS ml/min WS	200 200	200 200	
Rigidity (Taber) 15° MD mN m CD	0.44* 0.24*	12.5 6.0	
Surface pH	7.5	7.5	

Environmental Information

Constituents of Paper

Fibre Source – 20% cotton, 80% virgin wood fibre from sawmill residues, forest thinnings and sustainable forest in Spain, Canada, Sweden, Germany, Brazil, USA and Portugal. *Mill Broke* - All broke is recycled and can be as high as 20% of the total fibre content. *Filler* – approx 16 grammes.

BLEACHING

Pulps used in the production of the above grade are Elemental Chlorine Free (ECF) giving a resultant AOX level of <0.5kg per 1,000 kg of pulp.

DISPOSAL OF WASTE BY-PRODUCTS

Soil conditioner and a small amount to landfill.

PAPER MILL EFFLUENT

Water used is suitably treated and in most cases returned to source in a better condition than when removed, in accordance with strict local laws. Water is reused many times.

ENERGY SOURCE **Gas**

TOTAL GROSS PRIMARY ENERGY (Paper Mill)

15.2 Giga Joules / 1,000 kg of paper.

This material is recyclable and bio-degradable. This product meets ISO 9706 requirements for permanence of paper. This Mill has ISO 9002 Accreditation. + This Mill has ISO 14001 Accreditation. + $\sqrt{}$

Technical Capability

Printing Process Screen Ruling Printing Inks	 Litho Up to 150 Conventional, UV and IR are preferred. High temperature resistant Fully Oxidizing ink for laser printing.
Embossing Hot Foil Blocking Thermography Laser/Copier Guaranteed Inkjet Guaranteed Permanence of Paper	 Yes Yes – Laser grade foil available. Yes Mono 100 g/m² (desktop only) Mono 100 g/m² Yes, ISO 9706

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Conqueror Wove High White (ECF) *

= amendment	+ = a	addition		X = de	eletion	
Substance g/m ²	70	80	90	100	120	300
Caliper µm (approx)	90	100	115	130	150	330
Opacity (ISO) %	85	85	87	91	93	-
Brightness (ISO) % C	84	84	84	84	84	84
Whiteness CIE D65	94	94	94	94	94	94
Smoothness (Bendtsen) TS ml/min WS	200 210	200 210	200 210	200 210	200 210	200 210
Rigidity (Taber) 15° MD mN m CD	0.24* 0.19*	0.27* 0.21*	0.38* 0.24*	0.49* 0.35*	0.78* 0.50*	13.5 6.5
Surface pH	7.2	7.2	7.2	7.2	7.2	7.2

Technical Information

Environmental Information

Constituents of Paper

Fibre Source – 20% cotton, 80% virgin wood fibre from sawmill residues, forest thinnings and sustainable forest in Spain, Canada, Sweden, Germany, Brazil, USA and Portugal. *Mill Broke* - All broke is recycled and can be as high as 20% of the total fibre content. *Filler* – approx 14 grammes.

BLEACHING

Pulps used in the production of the above grade are Elemental Chlorine Free (ECF) giving a resultant AOX level of <0.5kg per 1,000 kg of pulp.

DISPOSAL OF WASTE BY-PRODUCTS

Soil conditioner and a small amount to landfill.

PAPER MILL EFFLUENT

Water used is suitably treated and in most cases returned to source in a better condition than when removed, in accordance with strict local laws. Water is reused many times.

ENERGY SOURCE Gas, Oil, Electricity

TOTAL GROSS PRIMARY ENERGY (Paper Mill)

14 Giga Joules / 1,000 kg of paper/board.

This material is recyclable and bio-degradable. This product meets ISO 9706 requirements for permanence of paper. This Mill has ISO 9002 Accreditation. : This Mill has ISO 14001 Accreditation. + X

Technical Capability

Printing Process Screen Ruling Printing Inks	 Litho Up to 200 Conventional, UV and IR are preferred. High temperature resistant Fully Oxidizing ink for laser printing.
Embossing Varnishing (board substances only)	 Yes Machine or UV silk screen varnishing are both possible, provided it is carried out on top of emulsion sealing. For high gloss results it will be necessary to Matt UV varnish on top of emulsion sealer before Gloss UV varnishing. Good results have been obtained by spot varnishing on solids or dense tones by either method. Any varnish applied direct to unprinted areas of the sheet may cause variations in gloss levels.
Emulsion Sealing (board substances only)	- Yes
Hot Foil Blocking Thermography Laser/Copier Guaranteed Inkjet Guaranteed Creasing	 Yes – Laser grade foil available. Yes Mono (desktop only) Mono Pre-creasing is advisable e.g. 300 g/m² or when folding through a solid or dense tone with , by using a creasing matrix
Permanence of Paper	- Yes, ISO 9706

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