# Rough Natural

**Rock**

05/11/2026

## DESCRIPTION

Rough Natural offers first and foremost a warm, subtle colour for reading comfort. Produced without fluorescent additives, Rough Natural is the ideal paper to restore colour balance and guarantee a perfect chromatic equilibrium.

## TECHNICAL SPECIFICATIONS

| Specifications | Units | 80 | 90 | 100 | 130 | 150 | 170 | 200 | 240 | 300 | 350 | 400 | Standards |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Substance | gsm | 80 | 90 | 100 | 130 | 150 | 170 | 200 | 240 | 300 | 350 | 400 | ISO 536 |
| Thickness | µm | 106 | 120 | 133 | 169 | 195 | 221 | 260 | 312 | 390 | 455 | 520 | |
| Bulk | $cm^3/g$ | 1.33 | 1.33 | 1.33 | 1.30 | 1.30 | 1.30 | 1.30 | 1.30 | 1.30 | 1.30 | 1.30 | ISO 534 |
| Stiffness | MD (mN.m) | 0.5 | 0.6 | 0.7 | 1.5 | 2.1 | 3.1 | 4.8 | 7.8 | 13.3 | 17.4 | 28.9 | ISO 2493 - 1 |
| | CD (mN.m) | 0.3 | 0.3 | 0.4 | 0.8 | 1.0 | 1.6 | 2.4 | 4.1 | 6.9 | 10.3 | 16.7 | |
| Bendtsen roughness | ml/min | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 300 | 300 | 300 | ISO 8791 - 2 |
| Absolute humidity | $\%H_2O$ | 4.6 | 4.6 | 5.0 | 5.5 | 6.0 | 6.0 | 6.5 | 6.5 | 7.0 | 7.0 | 7.0 | ISO 287 |
| Relative humidity | % in the air | 32 | 32 | 38 | 44 | 48 | 48 | 50 | 50 | 60 | 60 | 60 | Sword measurement |
| Opacity | % | 88 | 90 | 91 | >99 | >99 | >99 | >99 | >99 | >99 | >99 | >99 | ISO 2471 |
| Tensile strength | MD (daN/15mm) | 5.7 | 6.4 | 7.2 | 8.6 | 9.0 | 12.7 | 13.7 | 15.3 | 17.0 | 23.6 | 23.4 | ISO 1924 - 2 |
| | CD (daN/15mm) | 2.9 | 3.3 | 3.9 | 4.5 | 4.9 | 6.6 | 7.5 | 8.4 | 9.5 | 13.7 | 14.0 | |
| Bursting strength | $kPa.m^2/g$ | 2.5 | 2.5 | 2.4 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.6 | 2.3 | ISO 2758 |
| Tearing strength | mN | 740 | 830 | 780 | 750 | 750 | 880 | 880 | 900 | 900 | 1060 | 1100 | ISO 1974 |
| Elongation at break | MD (m) | 1.9 | 2.1 | 2.0 | 1.9 | 1.9 | 2.1 | 2.1 | 2.0 | 1.9 | 2.4 | 2.2 | ISO 1924 - 2 |
| | CD (m) | 4.7 | 5.2 | 5.1 | 4.6 | 4.2 | 4.5 | 4.5 | 4.2 | 4.0 | 4.5 | 5.0 | |
| Durability of fibres | | | | | | | | | | | | | ISO 9706 |

JetPro™ TECHNOLOGY

A symbol of Clairefontaine's innovation, the JetPro® logo guarantees high-performance papers specifically designed to deliver inkjet printing with optimal precision and color quality.

### APPLICATIONS

| | |
|---|---|
| Brochures | ● |
| Cases | ● |
| Box set | ● |
| Illustrated books | ● |
| Greeting cards | ● |

### PRINTING SUGGESTIONS

| | |
|---|---|
| Inkjet | ● |
| Offset | ● |
| Letterpress | ● |
| Silk-screen | ● |
| Hot foil stamping | ● |

### CONVERTING SUGGESTIONS

| | |
|---|---|
| Die-cutting | ● |
| Embossing | ● |
| Etching | ● |
| Scoring | ● |
| Folding | ● |
| Glueing | ● |

*For packaging or book publishing, the fibres direction should run parallel to the main fold.

## COMPLIANCE AND SUSTAINABILITY

No PFAS added

REACH (CE n° 1907/2006)
The product does not contain any candidate substances (SVHC) listed by ECHA at a concentration exceeding 0.1% by mass.

## CERTIFICATIONS

FSC www.fsc.org FSC® C002321 The mark of responsible forestry

ECF ELEMENTAL Chlorine FREE

**ISO 9001**
Quality Management System

**ISO 14001**
Environmental Management System

**ISO 50001**
Energy Management System