

Standards Council of Canada
Accredited Laboratory
Scope of Accreditation 262



Conseil canadien des normes
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All our physical testing and quality assurance services are ISO 17025-accredited by the Standards Council of Canada. As such, they comply with our clients' ISO 9000 quality assurance requirements.



ORDERING INFORMATION for Bleached Eucalyptus Kraft Pulp

The pulp is a fully bleached eucalyptus kraft which is sold in sheet form. It is supplied in approximately 400-gram packages. This reference pulp has been cut into 20 cm × 18 cm sheets, randomized and placed in a plastic bag to prevent drying out.

Physical Properties *All values based on 14 measurements*

Unbeaten Pulp Properties	Value	± 2 Standard Deviation
Disintegration Time, min	10	
CSF, mL	543	23
Schopper Riegler, SR	21	5
Bulk, cm ³ /g	2.23	0.16
Burst Index, kPa.m ² /g	0.53	0.17
Tear Index, mN.m ² /g	2.34	0.52
Breaking Length, km	1.63	0.36
Average Fibre Length, mm FQA		
Arithmetic	0.56	0.05
Length Weighted	0.71	0.03
Weight Weighted	0.93	0.19
Coarseness, mg/m	0.064	0.004

DISINTEGRATION: Processed according to PAPTAC Standard C.10P using a two (2) litre container at 1.2% consistency. Data based on 14 samples.

PFI Beaten Properties

Rev's	CSF, mL	Schopper Riegler SR	Bulk, cm ³ /g	Burst Index, kPa.m ² /g	Tear Index, mN.m ² /g	Breaking Length, km
1000	455 ± 23	27 ± 3	2.05 ± .08	1.39 ± .21	4.78 ± 1.12	3.11 ± .46
3000	385 ± 30	33 ± 2	1.90 ± .05	2.03 ± .29	6.15 ± 1.00	4.23 ± .67
6000	331 ± 29	39 ± 4	1.82 ± .08	2.54 ± .27	7.05 ± .96	4.95 ± .60

PFI MILL: Processed according to PAPTAC Standard C.7 using a two (2) litre container at 1.2% consistency. Data base on 14 runs

- All data are based on O.D. weight of pulp.
- For each parameter in the table, the mean and twice the standard deviation are shown. About five (5) tests in one hundred (100) will fall outside plus or minus twice the standard deviation.

FOR ORDERING AND GENERAL INFORMATION

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Related Information

Physical Properties

PULP PREPARATION: The test specimen should be hand torn into pieces approximately 12 mm square. Cutting the sample, or the use of cut edges, must be avoided as this can affect the physical properties. A minimum of four (4) hours soaking time in distilled or deionized water at room temperature are required prior to pulp disintegration.

DISINTEGRATION FOR UNBEATEN PULP PROPERTIES: Ten (10) minutes in distilled or deionized water at 1.2 % consistency (24.00 ± 0.25 g o.d. in 2000 ± 20 mL) in a Standard Disintegrator. The data for the ten (10) minute disintegration is to be taken as 0 beating time for the PFI mill.

CANADIAN STANDARD FREENESS (CSF): The test is to be carried out with distilled or deionized water. For improved accuracy, all CSF values were obtained by weight rather than volume.

PROCEDURE FOR COARSENESS: After disintegration transfer 1.0 g (O.D.) of pulp to a suitable container, dilute to 2 L with water, and accurately determine the consistency according to PAPTAC Standard D.16. For the Kajaani FS-200, transfer (to the nearest 0.0001 g) the equivalent of 0.006 - 0.012 g (O.D.), for the FQA, transfer (to the nearest 0.0001 g) the equivalent of 0.001 g (O.D.) of pulp, to the sampling station of the fibre length analyzer using a pipette with a tip opening diameter of at least 2 mm, and the entire suspension, agitated continuously, is passed through the analyzer. From a knowledge of the total fibre mass and the total fibre length, the coarseness (mg/m) can then be determined.

PFI: For each beating level, disintegrate the pulp sample (24.00 ± 0.25 g (O.D.) in 2000 ± 20 mL) for five (5) minutes prior to beating. Beating is to be carried out with distilled or deionized water. After beating and before freeness determination and handsheet preparation, disintegrate the pulp in 2000 ± 20 mL of water for five (5) minutes in a Standard Disintegrator.

Additional notes:

- The quality of the water can adversely affect the freeness and handsheet test results. Distilled or deionized water must be used as stated. Tap water is not recommended.
- Pulp preparation, handsheet making and testing were carried out in accordance with PAPTAC Standard Methods. In order to reproduce the above results, laboratories must ensure that the procedures stated above are strictly adhered to, and that all testing equipment is properly maintained and calibrated.