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Third edition
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Pulps — Laboratory sheets — Determination of physical properties

Pâtes — Feuilles de laboratoire — Détermination des propriétés physiques



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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 5270 was prepared by Technical Committee ISO/TC 6, *Paper, board and pulps*, Subcommittee SC 5, *Test methods and quality specifications for pulps*.

This third edition cancels and replaces the second edition (ISO 5270:1998), which has been technically revised. The list of relevant International Standards for paper and board, to be used for testing the physical properties of laboratory sheets, has been updated and new standards, such as ISO 1924-3 and ISO 15754, have been included. The option to determine air permeance, using the Bendtsen method (ISO 5636-3) or the Sheffield method (ISO 5636-4) has been inserted, as well as the option to measure optical properties.

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Introduction

This International Standard includes the determination of physical properties of both “low grammage” sheets and “high grammage” sheets, prepared in accordance with ISO 5269-1, ISO 5269-2 or ISO 5269-3. The oven-dry grammage of the “low grammage” sheets is (60 ± 2) g/m² using the conventional sheet former, as described in ISO 5269-1 and ISO 5269-3, or (75 ± 2) g/m² using the Rapid-Köthen sheet former, as described in ISO 5269-2 and ISO 5269-3. The oven-dry grammage of the “high grammage” sheets is 140 g/m², with a tolerance of 3 % using the conventional and the Rapid Köthen sheet formers, except for the z-directional tensile strength where the grammage is ≥ 90 g/m².

For determination of physical properties, ISO 5270 refers to the relevant International Standards for paper and board for the description and calibration of the required equipment, and for the calculation and reporting of results. This International Standard, however, specifies the procedures for testing laboratory sheets where the amount of material is limited, compared to testing of paper and board to which the relevant International Standards referred to are applicable, and for that reason there may be a discrepancy.