भारतीय मानक मसौदा

लुगदी के लिए परीक्षण पद्धति

भाग 8 — कागज़, बोर्ड, लुगदी और सेलूलोज़ नैनोमटेरियल्स

अनुभाग 5 — शुष्क पदार्थ सामग्री का निर्धारण — ओवन से सुखाने की पद्धति — सेल्युलोसिक नैनोमटेरियल्स का निलंबन

Draft Indian Standard

Methods of Test for Pulp

Part 8 — Paper, board, pulps and cellulosic nanomaterials

Section 5 — Determination of dry matter content by oven-drying method — Suspensions of cellulosic nanomaterials

ICS 85.040; 85.060

Paper and its Products Sectional Committee, CHD 15	Last date of comments: 05th August 2024

NATIONAL FOREWORD
(*formal clauses to be added later*)

During the chemical and physical analysis of paper, pulp, board and cellulosic nanomaterials, concurrent determination of dry matter content and moisture content are carried out for various purposes. The determination of dry matter content is carried out through oven drying method which is possible when the sample does not contain any

appreciable quantity of matter, other than water, volatile at the temperature specified for the drying. In this method the sample should be either in solid form or in suspensions.

This standard covers determination of dry matter content in paper, pulp, board and cellulosic nanomaterials in suspensions form. A separate standard is being published for determination of dry matter content of samples in solid form.

ISO has published test method standards related to paper, pulp and board under three broad categories namely 'Paper, board and pulps', 'Paper and board' and 'Pulps'. Related Indian Standards published in IS 1060 (Parts 1, 2 and 3) 'Methods of sampling and test for paper and allied products' and IS 6213 series of standards published for 'Methods of test for pulps' are widely recognized and used in India. To maintain consistency with the prevailing international practices and to retain the existing test methods series, the committee responsible for formulating this standard decided to harmonize the methods of tests prescribed in IS 1060 series and IS 6213 series with those published by ISO and publish these adopted test methods standards in subsequent parts/ sections of IS 1060 series or IS 6213 series.

Related Indian Standards on methods of test have been published in the following other parts of IS 1060 series on 'Methods of sampling and test for paper and allied products':

Part 4 Methods of test for paper, board and pulp

Part 5 Methods of test for paper and board

Part 6 Methods of test for paper

Part 7 Methods of test for board

This standard is being published as Part 8 'Methods of test for paper, board, pulps and cellulose nanomaterials' of IS 1060 series. This Section of IS 1060 (Part 8) specifies an oven-drying method for the determination of the dry matter content in suspensions of cellulosic nanomaterials. The other sections of IS 1060 (Part 8) are:

Sec 1	Determination of residue (ash content) on ignition at 525 °C CHD 15 (25952) WC
Sec 2	Determination of residue (ash content) on ignition at 900 °C CHD 15 (25962) WC
Sec 3	Determination of acid-soluble magnesium, calcium, manganese, iron, copper, sodium and potassium CHD 15 (25971) WC

Sec 4 Determination of dry matter content by oven-drying method — Materials in solid form
CHD 15 (26254) WC

Considering the benefits of aligning standard with that of international standards, the Committee decided to prepare this standard by identical adoption of ISO 638-2 : 2022 'Paper, board, pulps and cellulosic nanomaterials — Determination of dry matter content by oven-drying method — Part 2: Suspensions of cellulosic nanomaterials' under dual numbering.

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'; and

b) Comma (,) has been used as a decimal marker, while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards where the standard atmospheric conditions to be observed are stipulated which are not applicable to tropical/subtropical countries. The applicable standard atmospheric conditions for Indian conditions are (27 ± 2) °C and (65 ± 5) percent relative humidity and shall be observed while using this standard.

In reporting the result of a test or analysis made in accordance with this standard, if the final value, observed or calculated, is to be rounded off, it shall be done in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'.

'FOR COMPLETE TEXT OF THE DOCUMENT, KINDLY REFER ISO 638-2 : 2022

Note: The technical content of the document has not been enclosed as these are identical with the corresponding ISO Standard. For obtaining the copy of the complete ISO Standard,

Please contact:

Scientist 'F'/Senior Director and Head (Chemical)
Chemical Department
Bureau of Indian Standards
Manak Bhavan, 9, Bahadur Shah Zafar Marg
New Delhi-110002
Telephone: 011-23236428

Email: chd@bis.gov.in or chd15@bis.org.in