

भारतीय मानक मसौदा  
कागज और संबद्ध उत्पादों के लिए नमूना चयन और परीक्षण की पद्धतियाँ  
भाग 4 कागज, बोर्ड और लुगदी के लिए परीक्षण पद्धतियाँ  
अनुभाग 9 पानी में घुलनशील सल्फेट्स का निर्धारण  
( दूसरा पुनरीक्षण )

*Draft Indian Standard*  
**Methods of Sampling and Test for  
Paper and Allied Products**  
Part 4 Methods of Test for Paper, Board and Pulp  
Section 9 Determination of water soluble sulfates  
( *Second Revision* )

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ICS 85.060; 85.040

Paper And Its Products Sectional Committee,  
CHD 15

**Last date of comments: 20<sup>th</sup> September 2023**

## NATIONAL FOREWORD

*(Formal clauses added to be later)*

This standard was originally published in 1960. During the formulation of this standard due weightage was given to the then existing International Standards.

Considering the benefits of aligning standard with that of international best practices, in 2014, the committee decided to revise the standard by identical adoption of ISO 9198: 2001 'Paper, board and pulp — Determination of water-soluble sulfates' under dual numbering.

ISO has published relevant test method standards under the three broad based titles namely 'Paper, board and pulps', 'Paper and board' and 'Pulps'. To maintain consistency with the prevailing international practices and also to facilitate search of the relevant test methods instantly, all adopted standards are published under the following two series;

(a) IS 1060 series on 'Methods of sampling and test for paper and allied products', and

(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

(b) IS 6213 series for ‘Methods of test for pulps’.

Considering that 2014 version was identical adoption of ISO 9198: 2001, the committee decided to further revise this standard by aligning it with ISO 9198: 2020 under dual numbering. During this revision, following changes have been made:

i. In 6.4 the addition of the option of filtering the suspension through a medium coarseness filter paper prior to withdrawing an aliquot with a syringe.

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’.

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 for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated.

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 186 Paper and board — Sampling to determine average quality	IS 1060 ( Part 5 / Sec 1) : 2014 Methods of Sampling and Test for Paper and Allied Products Part 5 Methods of Test for Paper and Board Section 1 Sampling to determine average quality	Identical with ISO 186: 2002
ISO 287 Paper and board — Determination of moisture content —Oven-drying method	IS 1060 (Part 5/Sec 2) : 2021 Methods of Sampling and Test for Paper and Allied Products Part 5 Methods of Test for Paper and Board Section 2 Determination of moisture content of a lot Oven-drying method	Identical with ISO 287: 2017

ISO 638 Paper, board and pulps — Determination of dry matter content — Oven-drying method	IS 6213 (Part 21) : 2019 Methods of test for pulp: Part 21 paper, board and pulps - Determination of dry matter content - Oven - Drying method ( <i>first revision</i> )	Identical with ISO 638: 2008
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The technical committee has reviewed the provisions of the following International Standard referred in this adopted standard and has decided that it is acceptable for use in conjunction with this standard:

<i>International Standard</i>	<i>Title</i>
ISO 7213	Pulps — Sampling for testing

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 / sub- tropical countries. The applicable standard atmospheric conditions for Indian conditions are  $27 \pm 2^{\circ}\text{C}$  and  $65 \pm 5$  percent relative humidity and shall be observed while using this standard.

In reporting the result of a test 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*)'.