Doc : CHD 17 (28715) WC
IS 5914 (Part 17) : 202X
ISO 17231 : 2017
October 2025

BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY

भारतीय मानक मसौदा

चमड़े के भौतिक परीक्षण की पद्धतियाँ

भाग 17 परिधान चमड़े की जल प्रत्याकर्षिता का निर्धारण

Draft Indian Standard

Methods of Physical Testing of Leather

Part 17 Determination of Water Repellency of Garment Leather

(ICS 59.140.30)

Leather, Tanning Materials and Allied Products, Sectional Committee, CHD 17	**Last Date for Comments**: **4th December 2025**

NATIONAL FOREWORD

(*Formal clause will be added later*)

IS 5914 : 1970 Methods of physical testing of leather prescribes the methods for carrying out physical tests for all types of leathers. The Committee responsible for formulating this standard has decided to harmonize the methods of test prescribed in IS 5914 with those prescribed in ISO/IULTCS standards. Accordingly, the Committee decided to retain IS 5914 and publish the harmonized/ adopted test methods published by ISO/IULTCS in various parts of IS 5914 as this standard is widely recognized by the Indian Leather Industry.

The Committee had further decided to publish the adopted/harmonized standards in the following manner:

a) Wherever an existing test method is being replaced by the corresponding ISO/IULTCS test method, the relevant part will be published as revision with the information in the national foreword about the method of IS 5914 being superseded; and

b) When a new test method is being incorporated in IS 5914, the same will be published as a new standard and as subsequent part/section of IS 5914.

The Committee responsible for formulation this standard decided to publish the latest version of ISO 17231 : 2017 ‘Leather — Physical and mechanical tests — Determination of water repellency of garment leather as IS 5914 (Part 17), which will supersede LP: 26 of IS 5914: 1970.

This part 17 specifies a method for determining the repellency of leather to surface wetting. It is applicable to all leathers intended for use in clothing. The method does not determine the resistance of leather to water penetration.

This standard has been published in several other parts. The other parts of this series are:

Part 1 Determination of water vapour absorption

Part 2 Determination of abrasion resistance

Sec 1 Taber method

Sec 2 Martindale ball plate method

Part 3 Determination of soiling

Sec 1 Rubbing (martindale) method

Sec 2 Tumbling method

Part 4 Determination of apparent density and mass per unit area

Part 5 Determination of tear load

Sec 1 Single edge tear

Sec 2 Double edge tear

Part 6 Determination of flex resistance

Sec 1 Flexometer method

Sec 2 Vamp flex method

Part 7 Determination of resistance to grain cracking and grain crack index

Part 8 Determination of tensile strength and percentage elongation

Part 9 Determination of heat resistance of patent leather

Part 10 Determination of surface coating thickness

Part 11 Determination of thickness

Part 12 Determination of water vapour permeability

Part 13 Determination of softness

Part 14 Determination of resistance to horizontal spread of flame (under preparation doc no. 28698)

Part 15 Determination of water resistance of heavy leathers (under preparation doc no. 28699)

Part 16 Leather — Determination of water resistance of flexible leather

Sec 1 Repeated linear compression (Penetrometer) (under preparation doc no. 28714)

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 the International Standard, while in Indian standard, 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 places, are listed below along with their degree of equivalence for the editions indicated:

International Standard	*Corresponding Indian Standard*	*Degree of Equivalence*

ISO 2418 Leather — Chemical, physical, mechanical and fastness tests — Position and preparation of specimens for testing	IS 5868 (Part 2) : 2025/ ISO 2418 : 2023 Leather — Method of Sampling Part 2 Position and preparation of specimens for testing for chemical, physical, mechanical and fastness tests	Identical
ISO 2419 Leather — Physical and mechanical tests —Specimen and test piece conditioning	Doc No. CHD/17/ 26062 IS 5868 (Part 3) : 20XX/ISO 2419 : 2024 Leather — Methods of Sampling Part 3 Specimen and test piece conditioning for physical and mechanical tests	Identical

The technical Committee has reviewed the provisions of the following International Standards referred in this adopted standard and has decided that they are acceptable for use in conjunction with this standard.

International Standard	*Title*
ISO 3696 : 1987	Water for analytical laboratory use — Specification and test methods

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 °C ± 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 17231 : 2017

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:

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