

BUREAU OF INDIAN STANDARDS

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भारतीय मानक मसौदा

कच्चे पेट्रोलियम, पेट्रोलियम और संबंधित उत्पादों के परीक्षण की विधियाँ

भाग 167 घनत्व का निर्धारण — दोलनशील यू-ट्यूब सेंसर के साथ प्रयोगशाला घनत्व मीटर

[IS 1448 Part 167 का पहला पुनरीक्षण]

Draft Indian Standard

**METHODS OF TEST FOR CRUDE PETROLEUM, PETROLEUM AND RELATED PRODUCTS
PART 167 DETERMINATION OF DENSITY — LABORATORY DENSITY METER WITH AN
OSCILLATING U-TUBE SENSOR**

[*First Revision* of IS 1448 Part 167]

(ICS 75.080)

Methods of sampling and test for petroleum and
related products of natural or synthetic Origin
(excluding bitumen) Sectional Committee, PCD 01

Last date for receipt of comment is
09 February 2025

NATIONAL FOREWORD

(Formal clauses will be added later).

This standard was originally published in 2018, as adoption of ISO 12185: 2024 Crude petroleum, petroleum products and related products — Determination of density — Laboratory density meter with an oscillating U-tube sensor. This (*first revision*) has been taken up to align it with latest version of ISO 12185: 2024.

The major changes in the revision are as follows:

- Definitions have been added in Clause 3;
- A quality control (QC) check has been added in 9.5.

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 Standard for which Indian Standard also exist. The corresponding Indian Standard, which is to be substituted in their respective places, is 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 3015:2019 Petroleum and related products from natural or synthetic sources — Determination of cloud point	IS 1448 (Part 10/Sec 1) : 2021 — Methods of test for petroleum and its products [p : 10] Petroleum and related products from natural or synthetic sources Section 1 Determination of cloud point (<i>Third Revision</i>)	Identical
ISO 3016:2019 Petroleum and related products from natural or synthetic sources — Determination of pour point	IS 1448 (Part 10/Sec 2) : 2021 — Methods of test for petroleum and its products [p : 10] Petroleum and related products from natural or synthetic sources section 2 determination of pour point (<i>Third Revision</i>)	Identical
ISO 3170:2004 Petroleum liquids — Manual sampling.	IS 1447 (Part 3) : 2021 — Methods of sampling of petroleum and its products: Part 3 method of sampling of semi - Solid and solid petroleum products (Second Revision)	Not Equivalent

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:

<i>International Standard</i>	<i>Title</i>
ISO 91	Petroleum and related products — Temperature and pressure volume correction factors (petroleum measurement tables) and standard reference conditions
ISO 3171	Petroleum liquids — Automatic pipe-line sampling.
IP 389	Determination of wax appearance temperature (WAT) of middle distillate fuels by differential thermal analysis (DTA) or differential scanning calorimetry (DSC)

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*)’.

NOTE — The technical content of this document has not been enclosed as this is identical with the corresponding ISO Standard. For details, please refer to ISO 12185: 2024 or kindly contact:

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