

BUREAU OF INDIAN STANDARDS

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भारतीय मानक मसौदा
पेट्रोलियम उत्पाद - मोटर ईंधन की दस्तक विशेषताओं का निर्धारण - अनुसंधान विधि
(IS1448 भाग 27 का तीसरा पुनरीक्षण)

Draft Indian Standard

**PETROLEUM PRODUCTS — DETERMINATION OF KNOCK
CHARACTERISTICS OF MOTOR FUELS — RESEARCH METHOD**

(Third Revision of IS 1448 Part 27)

(ICS No. 75.160.20)

Methods of Sampling and Test for Petroleum and
Related Products of Natural or Synthetic Origin
(excluding Bitumen) PCD 01

Last date for receipt of comment is
24 June 2024

NATIONAL FOREWORD

(Formal clauses will be added later)

This standard was originally published in 1960 and subsequently revised in 2013. The first revision of this standard was identical with ISO 5164: 2005 and publish the standard under dual numbering system. The second revision was identical with ISO 5164: 2014 “Petroleum products — Determination of knock characteristics of motor fuels — Research method”. This (third) revision has been undertaken to update the corresponding Indian Standards.

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 are 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 3170, Petroleum liquids — Manual sampling	IS 1447 (Part 1) : 2021— Methods of Sampling of Petroleum and its Products Part 1 Manual Sampling (<i>Second Revision</i>)	Not Equivalent
ISO 4787, Laboratory glassware — Volumetric instruments — Methods for testing of capacity and for use	IS 18235 : 2023 — Laboratory glass and plastic ware – Volumetric instruments - Methods for testing of capacity and for use (<i>First Revision</i>)	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:

<i>International Standard</i>	<i>Title</i>
ISO 3171: 1988	Petroleum liquids — Automatic pipeline sampling
ISO 3696: 1987	Water for analytical laboratory use — Specification and test methods
ASTM D2699-12	Standard Test Method for Research Octane Number of Spark-Ignition Engine Fuel

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 5164: 2014 or kindly contact:

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