

BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY

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भारतीय मानक मसौदा

**ठोस जैव ईंधन - प्रमुख तत्वों का निर्धारण – अल, सीए, एफइ, एमजी, पी, के, एसआई,
एनए और टीआई**

Draft Indian Standard

**SOLID BIOFUELS — DETERMINATION OF MAJOR ELEMENTS — Al, Ca, Fe, Mg,
P, K, Si, Na AND Ti
(ICS 75.160.40)**

Solid Mineral Fuels and Solid Biofuels
Sectional Committee, PCD 07

Last date for comments:
8 June 2024

NATIONAL FOREWORD

(Formal clauses will be added later)

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 7980, Water quality — Determination of calcium and magnesium — Atomic absorption spectrometric method	IS 3025 (Part 40) : 1991 Water and wastewater - Methods of sampling and test (Physical and Chemical): Part 40 calcium (First Revision) <i>and</i>	Not Equivalent

	IS 3025 (Part 46) : 2023 Methods of Sampling and Test Physical and Chemical for Water and Wastewater Part 46 Magnesium (Second Revision)	
ISO 9964-1, Water quality — Determination of sodium and potassium — Part 1: Determination of sodium by atomic absorption spectrometry		Not Equivalent
ISO 9964-2, Water quality — Determination of sodium and potassium — Part 2: Determination of potassium by atomic absorption spectrometry	IS 3025 (Part 45) : 1993 Methods of sampling and test (physical and chemical) for water and wastewater: Part 45 Sodium and potassium (<i>first revision</i>)	Not Equivalent
ISO 9964-3, Water quality — Determination of sodium and potassium — Part 3: Determination of sodium and potassium by flame emission spectrometry		Not Equivalent
ISO 11885, Water quality — Determination of selected elements by inductively coupled plasma optical emission spectrometry (ICP-OES)	IS 3025 (Part 2) : 2019 / ISO 11885 : 2007 Methods of sampling and test (physical and chemical) for water and wastewater Part 2 Determination of selected elements by inductively coupled plasma optical emission spectrometry (ICP-OES) (<i>first revision</i>)	Identical
ISO 14780, Solid biofuels — Sample preparation	PCD 07 (20276) Solid biofuels — Sample preparation (<i>under printing</i>)	Not Equivalent
ISO 16559, Solid biofuels — Vocabulary	PCD 07 (19505) Solid biofuels — Vocabulary (<i>under printing</i>)	Not Equivalent
ISO 17294-2 Water quality — Application of inductively coupled plasma mass spectrometry (ICP-MS) — Part 2: Determination of selected elements including uranium isotopes	IS 3025 (Part 65) : 2022/ ISO 17294-2 : 2016 Methods of Sampling and Test Physical and Chemical for Water and Wastewater Part 65 Application of Inductively Coupled Plasma Mass Spectrometry (ICP-MS) — Determination of selected elements	Identical with ISO 17294-2:2016

	including Uranium Isotopes (<i>first revision</i>)	
ISO 18122, Solid biofuels — Determination of ash content	PCD 07 (25095) Solid biofuels - Determination of ash content (<i>under revision</i>)	Identical
ISO 18134-3, Solid biofuels — Determination of moisture content — Oven dry method — Part 3: Moisture in general analysis sample	PCD 07 (25096) Solid biofuels — Determination of moisture content — Oven dry method: Part 3 Moisture in general analysis sample (<i>under 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 16993	Solid biofuels — Conversion of analytical results from one basis to another

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 ISO Standard. For details, please refer to ISO 16967 : 2015 or kindly contact:

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