

INTERNATIONAL STANDARD

ISO
9768

First edition
1990-10-01

Tea — Determination of water extract

Thé — Détermination de l'extrait à l'eau



Reference number
ISO 9768:1990(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 9768 was prepared by Technical Committee ISO/TC 34, *Agricultural food products*.

This first edition of ISO 9768 cancels and replaces ISO 1574:1980, of which it constitutes a technical revision.

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Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

Tea — Determination of water extract

1 Scope

This International Standard specifies a method for the determination of the water extract from unground tea.

NOTE 1 Special sample preparation for very large leaf green and black teas may be required. Further work to determine the precise method of sample preparation for these teas is being undertaken.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 1573:1980, *Tea — Determination of loss in mass at 103 °C*.

3 Definition

For the purposes of this International Standard, the following definition applies.

water extract: The soluble matter extracted from a test portion by boiling water, under the conditions specified in this International Standard, expressed as a percentage by mass on the dry basis.

4 Principle

Extraction of soluble matter from a test portion of the product by means of water boiling under reflux. Filtration, washing, drying and weighing of the hot-water-insoluble residue. Calculation of the water extract.

5 Apparatus

Usual laboratory apparatus and, in particular, the following.

5.1 Oven, constant-temperature and fan-assisted, capable of being controlled at $103\text{ °C} \pm 2\text{ °C}$.

5.2 Crucible, made of sintered borosilicate glass, of porosity grade P160, 40 mm in diameter and of 70 ml capacity.

5.3 Desiccator, containing an efficient desiccant.

5.4 Flask, of 500 ml capacity, fitted with a reflux condenser.

5.5 Filter flask, of 1 litre capacity, for vacuum filtration.

6 Test sample

Use an unground test sample of known dry matter content, determined using the method specified in ISO 1573.

7 Procedure

7.1 Preparation of the crucible

Heat the clean crucible (5.2) for 1 h in the oven (5.1) at $103\text{ °C} \pm 2\text{ °C}$. Cool in the desiccator (5.3) and weigh to the nearest 0,001 g.

7.2 Test portion

Weigh, to the nearest 0,001 g, 2 g of the unground test sample (clause 6) into the flask (5.4).

7.3 Determination

Add to the test portion (7.2) 200 ml of hot distilled water, or water of at least equivalent purity, and reflux over low heat for 1 h, rotating the flask oc-