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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
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МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Tea — Determination of water-soluble ash and water-insoluble ash

Thé — Détermination des cendres solubles et des cendres insolubles dans l'eau

Reference number
ISO 1576 : 1988 (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 approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 1576 was prepared by Technical Committee ISO/TC 34, *Agricultural food products.*

This second edition cancels and replaces the first edition (ISO 1576 : 1975), of which it constitutes a minor revision.

Printed in Switzerland

Tea — Determination of water-soluble ash and water-insoluble ash

1 Scope

This International Standard specifies a method for the determination of the water-soluble ash and the water-insoluble ash of tea.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were 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 editions of the standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 1572 : 1980, *Tea — Preparation of ground sample of known dry matter content.*

ISO 1575 : 1987, *Tea — Determination of total ash.*

3 Definitions

For the purposes of this International Standard, the following definitions apply.

3.1 water-soluble ash: The part of the total ash dissolved by water under the conditions specified in this International Standard.

3.2 water-insoluble ash: The part of the total ash remaining after treatment with water under the conditions specified in this International Standard.

4 Principle

Extraction of the total ash with hot water, filtration through ashless filter paper, ignition and weighing of the residue to determine the insoluble ash; calculation of the soluble ash by difference.

5 Apparatus

Usual laboratory apparatus and, in particular, the following.

5.1 Dish, of 50 ml to 100 ml capacity, used for the determination of total ash.

NOTE — It is considered that silica dishes are unsuitable for use with this test.

5.2 Furnace, capable of being controlled at 525 °C ± 25 °C.

5.3 Steam-bath.

5.4 Filter paper, ashless.

5.5 Desiccator, containing an effective desiccant.

5.6 Analytical balance.

6 Procedure

6.1 Test portion

Use the total ash obtained from the determination specified in ISO 1575.

6.2 Determination

6.2.1 Add 20 ml of distilled water (or water of at least equivalent purity) to the total ash in the dish (5.1), heat nearly to boiling and filter through the filter paper (5.4). Wash the dish and the filter paper with hot distilled water (or water of at least equivalent purity) until the volume of the combined filtrate and washings is about 60 ml. Return the filter paper and contents to the dish (5.1), evaporate off the water carefully on the steam-bath (5.3), and heat in the furnace (5.2) at 525 °C ± 25 °C until the ash is free from visible carbon particles. Cool in the desiccator (5.5) and weigh. Heat again in the furnace for 30 min, cool and weigh, and repeat these operations, if necessary, until the difference between two successive weighings is less than 0,001 g. Note the lowest mass.