INTERNATIONAL STANDARD

ISO 3513

Second edition
1995-05-01

Chillies — Determination of Scoville index

Piments enragés (dits "de Cayenne") — Détermination de l'indice Scoville

Reference number
ISO 3513:1995(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 3513 was prepared by Technical Committee ISO/TC 34, *Agricultural food products*, Subcommittee SC 7, *Spices and condiments*.

This second edition cancels and replaces the first edition (ISO 3513:1977), of which it constitutes a technical revision.

Annex A forms an integral part of this International Standard.

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Chillies — Determination of Scoville index

1 Scope

This International Standard specifies a method for the determination of the Scoville index of chillies, whole or ground, unadulterated by other spices or products.

NOTE 1 Chillies commonly tested for their pungency are those of the species *Capsicum frutescens* Linnaeus.

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 indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 2825:1981, *Spices and condiments — Preparation of a ground sample for analysis.*

ISO 3696:1987, *Water for analytical laboratory use — Specification and test methods.*

ISO 3972:1991, *Sensory analysis — Methodology — Method of investigating sensitivity of taste.*

ISO 6658:1985, *Sensory analysis — Methodology — General guidance.*

ISO 8586-1:1993, *Sensory analysis — General guidance for the selection, training and monitoring of assessors — Part 1: Selected assessors.*

3 Definitions

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

3.1 Scoville index: Greatest dilution, i.e. the dilution factor, at which the characteristic pungent sensation from chillies is perceived under the test conditions specified in this International Standard.

3.2 schedule: The particular procedure, adopted in accordance with the test conditions specified in this International Standard and with the expected level of pungency, and designated by an alphabetic code.

4 Principle

Extraction of a test portion with ethanol, and filtration. Preparation of aqueous dilutions of this test portion of different concentrations then determination of the Scoville index by a sensory analysis panel.

5 Reagents

Use only reagents of recognized analytical grade and grade 3 water in accordance with ISO 3696.

5.1 Ethanol, 95 % (*V/V*) solution.

5.2 Sucrose, 50 g/l solution.

6 Apparatus

Usual laboratory apparatus and, in particular, the following.

6.1 One-mark volumetric flasks, of 50 ml and 100 ml capacity, provided with stoppers.

6.2 Graduated pipettes, of 1 ml capacity, graduated in 0,01 ml divisions.

6.3 One-mark pipettes, of 5 ml capacity.

6.4 Filter paper, medium/fine.

6.5 Beaker, of capacity 50 ml.