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**Rice — Determination of rice kernel  
resistance to extrusion after cooking**

*Riz — Détermination de la résistance à l'extrusion des grains de riz  
après cuisson*



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ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

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## 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 11747 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 4, *Cereals and pulses*.

# Rice — Determination of rice kernel resistance to extrusion after cooking

## 1 Scope

This International Standard specifies a method for the determination of resistance to extrusion of milled rice kernels, parboiled or not parboiled, after cooking under specified conditions.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 712, *Cereals and cereal products — Determination of moisture content — Reference method*

ISO 7301, *Rice — Specification*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 7301 and the following apply.

### 3.1

#### **cooked rice**

rice brought into contact with hot liquids with the intention of making it suitable for consumption

### 3.2

#### **resistance to extrusion**

ease of pushing cooked rice through a perforated plate using compression and shear

NOTE An example of suitable perforated plate is the Ottawa cell.<sup>1)</sup>

## 4 Principle

Measurement of the force required to extrude cooked rice through a perforated plate.

## 5 Apparatus

Usual laboratory apparatus and, in particular, the following.

**5.1 Beakers**, borosilicate glass, capacity of 100 ml.

**5.2 Cooking container**, with a non-hermetic lid and a perforated plate on which the beakers (5.1) are placed. The level of water in the cooking container shall be such that it does not rise above the perforated plate during boiling, ensuring that cooking occurs exclusively by steam.

**5.3 Sample divider,<sup>2)</sup> conical sampler or multiple-slot sampler** with a distribution system, or other equivalent equipment.

1) The Ottawa cell is an example of a suitable product available commercially. This information is given for the convenience of users of this document and does not constitute an endorsement by ISO of this product.

2) Some sample dividers are described in ISO 24333.<sup>[2]</sup>