

This is a preview of "ISO 11292:1995". [Click here to purchase the full version from the ANSI store.](#)

STANDARD

11292

First edition  
1995-06-15

Corrected and reprinted  
1997-02-01

---

---

**Instant coffee — Determination of free  
and total carbohydrate contents —  
Method using high-performance  
anion-exchange chromatography**

*Café soluble — Détermination des teneurs en hydrates de carbone libres  
et totaux — Méthode par chromatographie d'échange d'anions à haute  
performance*



Reference number  
ISO 11292:1995(E)

This is a preview of "ISO 11292:1995". [Click here to purchase the full version from the ANSI store.](#)

## 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 11292 was prepared by Technical Committee ISO/TC 34, *Agricultural food products*, Subcommittee SC 15, *Coffee*.

Annexes A and B of this International Standard are for information only.

© ISO 1995

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization  
Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

This is a preview of "ISO 11292:1995". [Click here to purchase the full version from the ANSI store.](#)

# Instant coffee — Determination of free and total carbohydrate contents — Method using high-performance anion-exchange chromatography

## 1 Scope

This International Standard specifies a method for the determination of free and total carbohydrate contents in instant coffee using high-performance anion-exchange chromatography. In particular, it determines the content of individual monosaccharides, sucrose and mannitol.

## 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 1042:1983, *Laboratory glassware — One-mark volumetric flasks.*

ISO 3509:1989, *Coffee and its products — Vocabulary.*

ISO 3726:1983, *Instant coffee — Determination of loss in mass at 70 °C under reduced pressure.*

## 3 Definitions

For the purposes of this International Standard, the definitions given in ISO 3509 and the following definitions apply.

**3.1 free carbohydrate content:** Content of each individual monosaccharide (arabinose, fructose, galactose, glucose, mannose), and the sucrose and mannitol contents, determined under the conditions described (method A). Content is expressed as a percentage by mass on a dry basis.

**3.2 total carbohydrate content:** Content of each individual monosaccharide (arabinose, galactose, glucose, mannose, xylose) and the mannitol content, determined under the conditions described, which includes a strong hydrolysis step (method B). Content is expressed as a percentage by mass on a dry basis.

## 4 Principle

### 4.1 Method A

Dissolution of a test portion in water. Separation of the carbohydrates present in the filtered extract by ion chromatography on a high-performance anion-exchange column (HPAEC) using pure water as eluent. Electrochemical detection of the eluted compounds by means of a pulsed amperometric detector (PAD) and quantification by comparison with peak areas given by standard solutions.