

First edition
1997-12-15

Corrected
1998-01-15

**Materials and articles in contact with
foodstuffs — Cutlery and table holloware —
Part 4:
Requirements for gold-plated cutlery**

*Matériaux et objets en contact avec les denrées alimentaires — Coutellerie
et orfèvrerie de table —*

Partie 4: Exigences relatives à la coutellerie et aux couverts dorés



Reference number
ISO 8442-4:1997(E)

AVA Documents
Document Sharing Hub

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 8442-4 was prepared by the European Committee for Standardization (CEN) in collaboration with ISO Technical Committee TC 186, *Cutlery and table and decorative metal hollow-ware*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

ISO 8442 consists of the following parts, under the general title *Materials and articles in contact with foodstuffs — Cutlery and table holloware*:

- *Part 1: Requirements for cutlery for the preparation of food*
- *Part 2: Requirements for stainless steel and silver-plated cutlery*
- *Part 3: Requirements for silver-plated table and decorative holloware*
- *Part 4: Requirements for gold-plated cutlery*

Further parts are proposed with the following titles:

- *Part 5: Specific cutting test*
- *Part 6: Lacquered lightly silver-plated table and decorative holloware*

© ISO 1997

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
Internet central@iso.ch
X.400 c=ch; a=400net; p=iso; o=isocs; s=central

Printed in Switzerland

- *Part 7: Specification for table cutlery made of precious metals and their alloys, especially silver cutlery*
- *Part 8: Specification for silver table and decorative holloware*

Annexes A to E form an integral part of this part of ISO 8442. Annex F is for information only.

Contents

	Page
Foreword	v
Introduction.....	v
1 Scope.....	1
2 Normative references.....	1
3 Definitions.....	1
4 Materials and their application	2
5 Construction.....	4
6 Gold plated cutlery.....	5
7 Performance requirements	5
8 Marking and labelling	7

Annexes

A (normative)	Test method for average thickness of gold coating.....	9
B (normative)	Schlegel method of determining surface area	10
C (normative)	Test method for corrosion resistance of unplated steel cutlery.....	12
D (normative)	Test method for strength of knives with martensitic stainless steel blades and carving forks.....	14
E (normative)	Test method for adhesion of gold coatings	16
F (informative)	Bibliography	17

Foreword

The text of EN ISO 8442-4:1997 has been prepared by Technical Committee CEN/TC 194 "Utensils in contact with food", the secretariat of which is held by BSI, in collaboration with Technical Committee ISO/TC 186 "Cutlery and table and decorative metal hollow-ware".

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 1998, and conflicting national standards shall be withdrawn at the latest by June 1998.

EN ISO 8442 consists of the following parts:

- Part 1: Requirements for cutlery for the preparation of food
- Part 2: Requirements for stainless steel and silver-plated cutlery
- Part 3: Requirements for silver-plated table and decorative holloware
- Part 4: Requirements for gold-plated cutlery

Further parts are proposed with the following titles:

- Part 5: Specific cutting test
- Part 6: Lacquered lightly silver-plated table and decorative holloware
- Part 7: Specification for table cutlery made of precious metals and their alloys, especially silver cutlery
- Part 8: Specification for silver table and decorative holloware

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxemburg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

This Standard does not cover those features of cutlery which are matter of personal choice for the user: such as the design, size, type of finish, blade flexibility or similar characteristics which can be readily identified by the purchaser at the point of sale.

Attention is drawn to Directives of the European Community concerning materials and articles in contact with food, in particular to Directives EC 89/109 and EC 90/128.

This page intentionally left blank

1 Scope

This Standard specifies the following requirements for gold plated cutlery:

- a) performance requirements for table cutlery (for example, knives, forks, spoons, carving sets, ladles, and other serving pieces);
- b) composition limits for base metals for cutlery;
- c) tests for resistance to permanent deformation, firmness of handle attachment, hardness of blades, resistance to corrosion and the thickness and adhesion of gold coatings;
- d) three minimum thicknesses of gold plating: a first class, a second class, and a third class.

This Standard specifies the method of defining gold deposits for each and every item and also test methods.

This Standard does not apply to table cutlery which has only small areas of gold plate as inlays in non gold plated decoration.

2 Normative references

This Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

ISO 1463	Metallic and oxide coatings - Measurement of coating thickness - Microscopical method
ISO 2177	Metallic coatings - Measurement of coating thickness - Coulometric method by anodic dissolution
ISO 3497	Metallic coatings - Measurement of coating thickness - X-ray spectrometric methods
ISO 3543	Metallic and non-metallic coatings - Measurement of thickness - Beta scatter method
ISO 4481 : 1977	Cutlery and flatware - Nomenclature
ISO 6508 : 1986	Metallic materials - Hardness test - Rockwell test (scales A - B - C - D - E - F - G - H - K)
EN ISO 8442-2	Materials and articles in contact with foodstuffs - Cutlery and table holloware - Part 2: Requirements for stainless steel and silver plated cutlery (ISO 8442-2:1997)

3 Definitions

For the purposes of this Standard the definitions given in ISO 4481:1977 and EN ISO 8442-2 apply together with the following.

3.1 hard gold plating: Refined gold plating containing elements which increase the hardness.

4 Materials and their application

4.1 General

The cutlery shall be made from materials that enable the finished product to meet all of the performance requirements of this standard.

NOTE: The cutlery should not under foreseeable conditions of use transfer any substance likely to be detrimental to health or to have any detrimental organoleptic effects.

4.2 Metals

4.2.1 The composition of metal parts of table cutlery shall be as given in table 1.

4.2.2 All gold plated parts of table cutlery shall be in accordance with the requirements of clause 6.