

STN	Klenoty. Stanovenie platiny v klenotníckych zliatinách platiny. Metóda vnútorného štandardu ICP-OES s prvkom yttria (ISO 11494: 2014).	STN EN ISO 11494 42 0667
------------	---	--

Jewellery - Determination of platinum in platinum jewellery alloys - ICP-OES method using yttrium as internal standard element (ISO 11494:2014)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 03/17

Obsahuje: EN ISO 11494:2016, ISO 11494:2014

124540

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2017
Podľa zákona č. 264/1999 Z. z. o technických požiadavkách na výrobky a o posudzovaní zhody a o zmene a doplnení niektorých zákonov v znení neskorších predpisov sa slovenská technická norma a časti slovenskej technickej normy môžu rozmnožovať alebo rozširovať len so súhlasom slovenského národného normalizačného orgánu.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 11494

October 2016

ICS 39.060

English Version

**Jewellery - Determination of platinum in platinum
jewellery alloys - ICP-OES method using yttrium as
internal standard element (ISO 11494:2014)**

Joaillerie, bijouterie - Dosage du platine dans les
alliages de platine pour la joaillerie, bijouterie -
Méthode par ICP-OES utilisant l'yttrium comme étalon
interne (ISO 11494:2014)

Schmuck - Bestimmung von Platin in
Platinschmucklegierungen - ICP-OES Verfahren unter
Verwendung von Yttrium als Internem
Standardelement (ISO 11494:2014)

This European Standard was approved by CEN on 26 August 2016.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents	Page
European foreword.....	3

European foreword

The text of ISO 11494:2014 has been prepared by Technical Committee ISO/TC 174 “Jewellery” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 11494:2016.

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 April 2017, and conflicting national standards shall be withdrawn at the latest by April 2017.

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

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 11494:2014 has been approved by CEN as EN ISO 11494:2016 without any modification.

**Jewellery — Determination of
platinum in platinum jewellery alloys
— ICP-OES method using yttrium as
internal standard element**

*Joannerie, bijouterie — Dosage du platine dans les alliages de platine
pour la joannerie, bijouterie — Méthode par ICP-OES utilisant
l'yttrium comme étalon interne*





COPYRIGHT PROTECTED DOCUMENT

© ISO 2014

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

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
Web www.iso.org

Published in Switzerland

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	1
5 Reagents	1
6 Equipment	2
7 Sampling	2
8 Procedure	2
8.1 Internal standard solution	2
8.2 Calibration solutions.....	3
8.3 Sample solution	3
8.4 Preparation of the platinum alloy solution containing ruthenium, iridium, or tungsten	3
8.5 Measurements	3
8.6 Calculation and expression of results.....	4
9 Repeatability	7
10 Test report	7
Bibliography	8

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: [Foreword — Supplementary information](#).

The committee responsible for this document is ISO/TC 174, *Jewellery*.

This second edition cancels and replaces the first edition (ISO 11494:2008), which has been technically revised with the following changes:

- a) change in the scope that this method is the referee method;
- b) addition of a warning in [Clause 8](#) that suitable health and safety procedures should be followed;
- c) addition of a standard solution in [8.1](#);
- d) addition of an alternative calibration solution in [8.2.2](#);
- e) addition of an alternative sample solution in [8.3.2](#);
- f) addition of an alternative route for calculation in [8.6.4](#);
- g) International Standard editorially revised.

Introduction

The following definitions apply in understanding how to implement an ISO International Standard and other normative ISO deliverables (TS, PAS, IWA):

- “shall” indicates a requirement;
- “should” indicates a recommendation;
- “may” is used to indicate that something is permitted;
- “can” is used to indicate that something is possible, for example, that an organization or individual is able to do something.

ISO/IEC Directives, Part 2 (sixth edition, 2011), 3.3.1 defines a requirement as an “expression in the content of a document conveying criteria to be fulfilled if compliance with the document is to be claimed and from which no deviation is permitted.”

ISO/IEC Directives, Part 2 (sixth edition, 2011), 3.3.2 defines a recommendation as an “expression in the content of a document conveying that among several possibilities one is recommended as particularly suitable, without mentioning or excluding others, or that a certain course of action is preferred but not necessarily required, or that (in the negative form) a certain possibility or course of action is deprecated but not prohibited.”

Jewellery — Determination of platinum in platinum jewellery alloys — ICP-OES method using yttrium as internal standard element

1 Scope

This International Standard describes a method for the determination of platinum in platinum jewellery alloys, preferably within the range of fineness specified in ISO 9202, by means of inductively coupled plasma optical emission spectrometry (ICP-OES).

This method applies to platinum jewellery alloys that might contain silver, indium, iridium, gallium, copper, cobalt, nickel, tin, and ruthenium. However, this list is not exhaustive and care is always to be taken to investigate potential interference effects.

This method is intended to be used as the recommended method for the determination of fineness in alloys covered by ISO 9202 up to 990 ‰.

2 Normative references

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

ISO 11596, *Jewellery — Sampling of precious metal alloys for and in jewellery and associated products*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN