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**Jewellery — Fineness of precious  
metal alloys**

*Joannerie — Titre des alliages de métaux précieux*



Reference number  
ISO 9202:2014(E)

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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.

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](http://www.iso.org/directives)).

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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 9202:1991), which has been technically revised.

The major technical changes are the following:

- a) inclusion of a recommended method in [Table 1](#);
- b) deletion of carat in [Table 1](#);
- c) addition of finesses in [Table 1](#);
- d) International Standard was 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.”

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# Jewellery — Fineness of precious metal alloys

## 1 Scope

This International Standard specifies a range of fineness of precious metal alloys (excluding solders) recommended for use in the field of jewellery.

National legal requirements for the designation, marking, and stamping of finished articles in the respective countries have to be taken into account.

## 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 11210, *Jewellery — Determination of platinum in platinum jewellery alloys — Gravimetric method after precipitation of diammonium hexachloroplatinate*

ISO 11426, *Jewellery — Determination of gold in gold jewellery alloys — Cupellation method (fire assay)*

ISO 11427, *Jewellery — Determination of silver in silver jewellery alloys — Volumetric (potentiometric) method using potassium bromide*

ISO 11490, *Jewellery — Determination of palladium in palladium jewellery alloys — Gravimetric determination with dimethylglyoxime*

ISO 11494, *Jewellery — Determination of platinum in platinum jewellery alloys — ICP OES method using yttrium as internal standard element*

ISO 11495, *Jewellery — Determination of palladium in palladium jewellery alloys — ICP OES method using yttrium as internal standard element*

ISO 13756, *Determination of silver in silver jewellery alloys — Volumetric (potentiometric) method using sodium chloride or potassium chloride*

ISO 15093, *Jewellery — Determination of precious metals in 999 ‰ gold, platinum and palladium jewellery alloys — Difference method using ICP-OES*

ISO 15096, *Jewellery — Determination of silver in 999 ‰ silver jewellery alloys — Difference method using ICP-OES*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 3.1

#### **fineness**

minimum content of the named precious metal, measured in terms of parts per thousand (‰) by weight of alloy

## 4 Analytical methods for determining fineness

For determining the fineness of precious metal alloys, one of the following test methods shall be used: ISO 11210, ISO 11426, ISO 11427, ISO 11490, ISO 11494, ISO 11495, ISO 13756, ISO 15093, or ISO 15096.

The recommended methods are listed in [Table 1](#).

## 5 Range of fineness

**Table 1 — Fineness of precious metal alloys**

Precious metal	Fineness <sup>a</sup> min.	Recommended method
Gold	333 <sup>b</sup>	ISO 11426
	375	
	417	
	585	
	750	
	916	
	990	
	999	ISO 11426 or ISO 15093
Platinum	500	ISO 11210 ISO 11494
	600	
	850	
	900	
	950	
	990	
		999
Palladium	500	ISO 11490
	950	ISO 11495
	990	
	999	ISO 15093
Silver	800	ISO 11427
	925	ISO 13756
	958	
	990	
	999	ISO 15096
<sup>a</sup> The fineness is stated as minimum value. No minus tolerance is allowed.		
<sup>b</sup> Values are given in parts per thousand (‰).		





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