SLOVENSKI STANDARD
SIST EN 1904:2002

01-februar-2002

Plemenite kovine - Ļistine spajk za spajkanje zlitin iz plemenitih kovin za izdelavo nakita

Precious metals - The finenesses of solders used with precious metal jewellery alloys

Edelmetall - Nennfeingehalte von Loten für Edelmetall-Schmucklegierungen

Métaux précieux - Titre des soudures utilisées pour les alliages de métaux précieux pour les articles de joaillerie

Ta slovenski standard je istoveten z: **EN 1904:2000**

ICS:

39.060	Nakit	Jewellery

SIST EN 1904:2002 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1904

September 2000

ICS 39.060

English version

Precious metals - The finenesses of solders used with precious metal jewellery alloys

Métaux précieux - Titre des soudures utilisées pour les alliages de métaux précieux pour les articles de joaillerie

Edelmetall - Nennfeingehalte von Loten für Edelmetall-Schmucklegierungen

This European Standard was approved by CEN on 25 February 2000.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

Ref. No. EN 1904:2000 E

Foreword

This European Standard has been prepared by Technical Committee CEN/TC 283 "Precious metals – Applications in jewellery and associated products", the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by March 2001, and conflicting national standards shall be withdrawn at the latest by March 2001.

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, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies the precious metal content in solders suitable for use in the production of jewellery made of precious metal alloys.

2 Normative References

This European 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 European Standard only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

EN ISO 11210, *Determination of platinum in platinum jewellery alloys - Gravimetric method after precipitation of diammonium hexachloroplatinate*

EN ISO 11426, *Determination of gold in gold jewellery alloys - Cuppelation method (fire assay)*

EN ISO 11489, *Determination of platinum in platinum jewellery alloys - Gravimetric method after reduction with mercury(I) chloride*

EN ISO 11490, *Determination of palladium in palladium jewellery alloys - Gravimetric method with dimethyl-glyoxime*

EN 31427, *Determination of silver in silver jewellery alloys - Volumetric (potentiometric) method using potassium bromide*

prEN 31494, *Determination of platinum in platinum jewellery alloys - ICP-solution-spectrometric method using Yttrium as internal standard element*

prEN 31495, *Determination of palladium in palladium jewellery alloys - ICP-solution-spectrometric method using Yttrium as internal standard element*

3 Definitions

For the purpose of this Standard, the following definitions apply:

3.1
assay
Analysis of precious metal by a published standard procedure.

3.2
fineness
The content of the named precious metal in the alloy in terms of parts per thousand by weight.

3.3
jewellery
Products made of precious metal alloys as described in Annex A (informative) with or without other materials, such as colliers, necklaces, bracelets, rings etc. as well as associated products.

3.4
precious metal
Platinum, gold, palladium and silver in the pure state and their alloys.

3.5
precious metal alloy
A solid mixture of a precious metal with one or more other metals made by melting or an electrochemical technic.

3.6
solder
An alloy used to join metal parts.

4 Requirements with regard to fineness

4.1 For joining parts of gold jewellery solder shall be used which has at least the same fineness as the article which will be soldered.

Exceptions to the above are:

- gold alloy articles with a fineness of more than 750/1000 shall be soldered with solder of a minimum fineness of 750/1000 gold.

- gold chains made from wire with less than 1 mm diameter can be soldered with solder without gold contents. The solders shall not induce a decrease of the measured mean fineness below the declared fineness.

4.2 For joining parts of platinum jewellery solder shall be used with a minimum total content of precious metals of 800/1000.

4.3 For joining parts of palladium jewellery solder shall be used with a minimum total content of precious metals of 700/1000.

4.4 For joining parts of silver jewellery solder shall be used with a minimum fineness of 550/1000 silver.

5 Determination of fineness

For the determination of the fineness the methods given in the referenced standards shall be used, if necessary in combination:

EN ISO 11210, EN ISO 11426, EN ISO 11489, EN ISO 11490, EN 31427, prEN 31494, prEN 31495.

ANNEX ZB (informative)

A-Deviations

A-Deviation: National deviation due to regulations, the alteration of which is for the time being outside the competence of the CEN/CENELEC member.

This European Standard does not fall under any Directive of EC.

In the relevant CEN/CENELEC countries these A-deviations are valid instead of the provisions of the European Standard until they have been removed.

Notification of deviation from Austria legislation as contained in the DVO (Durchführungsverordung) concerning the marking law.

Clause	**Deviation asked from Austria**
4.1 and 4.2	"Annex : In § 3 Abs. 3 DVO zum Punzierungsgesetz steht: Das Lot darf das zur Lötungnotwendige Mass nicht überschreiten und muss wenigstens die Hälfte des Feingehaltes des Platin-, Gold- oder Silbergegenstandes besitzen, zu dessen Lötung es dient. Diese Bestimmung ist in den Punkten 4.1 und 4.2 des vorliegenden Normentwurfes prEN 1904 nicht erfüllt." Note – English translation made from the Secretariat: The filler metal shall not exceed the necessary mass for the soldering, the filler metal shall also have at least half of the fineness of the precious metal platinum or gold or silver alloy soldered

Notification of deviation from UK legislation as contained in the Hallmarking Act 1973 as amended by Statutory Instruments 1976 No: 730, 1981 No. 559 and 1998 No. 2978

Clause	**Deviation asked from U.K.**
3.6	Hallmarking Act 1973 (Chapter 43, Section 4 on 'Approved hallmarks') as amended by Statutory Instruments 1976 No. 730, , 1981 No. 559 and 1998 No. 2978 As defined in paragraph 3 (c), 'solder' is an 'alloy used to join metal parts and not for strengthening, weighting, filling or otherwise'.
4	Hallmarking Act 1973 (Chapter 43, Section 4 on 'Approved hallmarks') as amended by Statutory Instruments 1976 No. 730, , 1981 No. 559 and 1998 No. 2978 Paragraph 3 (b) (i) states that in order for a gold article to be sold on the UK markets, the gold solder used has to be of a fineness not less than the standard of fineness of the article. Exceptions to this are the following. - Item (a): for gold articles of standard of fineness of 916.6 or above, the gold solder has to be of a minimum fineness of 750. - Item (b): in gold filigree work or watchcases, either of a standard of fineness of 750, the gold solder has to be of a minimum fineness of 740. - Item (c): in an article of white gold of a standard of fineness of not less than 585 and not more than 750, the gold solder has to be of a minimum fineness of 500. Paragraph 3 (b) (ii) states that in order for a silver article of a standard of fineness of 925 to be sold on the UK markets, the silver solder has to be of a minimum fineness of 650. Paragraph 3 (b) (i) states that in order for a platinum article to be sold on the UK markets, the platinum solder (i.e. gold, silver, platinum or palladium or a combination of two or more thereof) is of a fineness or, as the case may be, of a combined fineness not less than the standard fineness of the article. Paragraph 3 (c) states that solder of a fineness less than the standard of fineness of the article or adhesive must be used in a quantity that is not less than is necessary for joining parts of the article, and must not be used for strengthening, weighting, filling or other purposes.

Bibliography

[1] EN 29202, *Jewellery - Fineness of precious metal alloys*

[2] COM(93) 322 final - SYN 472, *Proposal for a Council Directive on articles of precious metal*