

Koppar och kopparlegeringar – Förlegeringar

Copper and copper alloys – Master alloys

Europastandarden EN 1981:2003 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN 1981:2003.

The European Standard EN 1981:2003 has the status of a Swedish Standard. This document contains the official English version of EN 1981:2003.

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English version

Copper and copper alloys - Master alloys

Cuivre et alliages de cuivre - Alliages-mères

Kupfer und Kupferlegierungen - Vorlegierungen

This European Standard was approved by CEN on 28 November 2002.

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 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 Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This document (EN 1981:2003) has been prepared by Technical Committee CEN/TC 133 "Copper and copperalloys", the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by August 2003, and conflicting national standards shall be withdrawn at the latest by August 2003.

This document supersedes EN 1981:1998.

In comparison with the first edition of EN 1981:1998, the following significant technical changes were made:

- a) Subclause 5 h) added;
- b) Compositions of the materials in Table 1 partially amended;
- c) CuMn20 (CM208E) and CuTi28 (CM235E) deleted;
- d) CuCo10 (CM237E), CuLi2 (CM123C), CuMg10 (CM238E), CuNi50 (CM239E), CuSi30(A) (CM240E), CuSi30(B) (CM241E), CuTi30 (CM244E), CuZr50(B) (CM242E), CuZr50(C) (CM243E) added.

Annex A is normative.

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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

This European Standard has been prepared at the suggestion of the manufacturers of cast and wrought copper alloys, by representatives of the producers and users of master alloys. There is, at present, no similar international standard for copper-based master alloys.

In several cases more than one grade of a particular master alloy is specified, having differing impurity limits, to satisfy the requirements of various end products.

1 Scope

This European Standard specifies the compositions of copper-based master alloys intended for the manufacture, deoxidation, or desulfurization of cast or wrought alloys, especially those based on copper, supplied in the form of ingots, notched bar, notched slab (waffle plate), granules or broken pieces.

A procedure is included for sampling the master alloys for analysis for verification of conformity to the composition requirements.

A method for the determination of chromium(III)-oxide in chromium-copper master alloy is given in annex A.

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 (including amendments).

EN 1655, *Copper and copper alloys — Declarations of conformity.*

EN 10204, *Metallic products — Types of inspection documents.*

NOTE Informative references to documents used in the preparation of this standard, and cited at the appropriate places in the text, are listed in the bibliography.

3 Terms and definitions

For the purposes of this standard, the following terms and definitions apply:

3.1

master alloy

alloy intended to add one or more elements to a melt

3.2

cast

product of one crucible, or one furnace, or one melt

3.3

batch

portion of master alloy taken from one cast

3.4

consignment

collection of products issued or received as one delivery, consisting of one or more batches of one master alloy

4 Designations

4.1 Material

4.1.1 General

The material is designated either by symbol or number (see Table 1).

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4.1.2 Symbol

The material symbol designation is based on the designation system given in ISO 1190-1.

NOTE Although material symbol designations used in this standard might be the same as those in other standards using the designation system given in ISO 1190-1, the detailed composition requirements are not necessarily the same.

4.1.3 Number

The material number designation is in accordance with the system given in EN 1412.

4.2 Product

The product designation provides a standardised pattern of designation from which a rapid and unequivocal description of a product is conveyed in communication. It provides mutual comprehension at the international level with regard to products which meet the requirements of the relevant European Standard.

The product designation is no substitute for the full content of the standard.

The product designation for products to this standard shall consist of:

- denomination (Copper master alloy);
- number of this European Standard (EN 1981);
- material designation, either symbol, or number (see Table 1);
- material form (the following designations shall be used as appropriate: ING for ingots, NOB for notched bars, NOS for notched slabs, GRN for granules and BPS for broken pieces) (see 6.2).

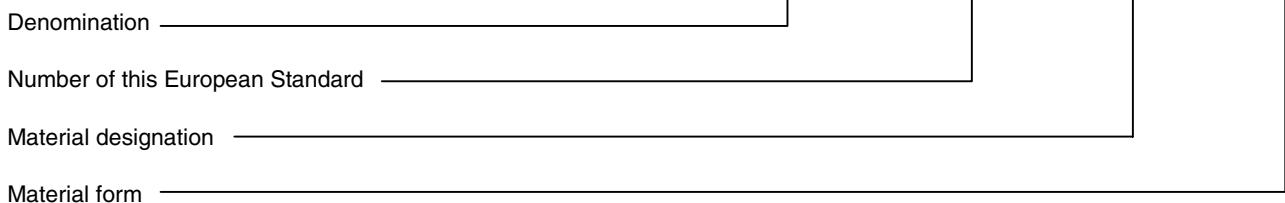
The derivation of a product designation is shown in the following example.

EXAMPLE Copper master alloy conforming to this standard, in material designated either CuP15(B) or CM218E, in the form of granules, shall be designated as follows:

Copper master alloy EN 1981 — CuP15(B) — GRN

or

Copper master alloy EN 1981 — CM218E — GRN



5 Ordering information

In order to facilitate the enquiry, order and confirmation of order procedures between the purchaser and the supplier, the purchaser shall state on his enquiry and order the following information:

- a) quantity of product required (mass);
- b) denomination (Copper master alloy);
- c) number of this European Standard (EN 1981);
- d) material designation (see Table 1);