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Copper sulfide concentrates — Determination of copper — Electrogravimetric method

*Concentrés de sulfure de cuivre — Dosage du cuivre — Méthode
électrogravimétrique*



Reference number
ISO 10469:2006(E)

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Contents

Page

Foreword.....	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Principle.....	1
4 Reagents	2
5 Apparatus	4
6 Sample	5
6.1 Test sample	5
6.2 Test portion	5
7 Procedure	5
7.1 Number of determinations	5
7.2 Blank test.....	5
7.3 Dissolution of test portion	5
7.4 Separation of arsenic, antimony, tin, selenium and silver	5
7.5 Copper separation	6
7.5.1 Sulfide separation.....	6
7.5.2 Hydroxide separation	7
7.6 Electrolytic deposition	7
7.7 FAAS determination of copper in the electrolyte, filter residues and sulfide precipitates	8
7.7.1 FAAS determination of copper in the filtrate of the sulfide precipitation	8
7.7.2 Treatment of hydroxide precipitate in sulfide separation	8
7.7.3 FAAS determination of copper in the electrolyte, filter residues and precipitates (sulfide separation method).....	8
7.8 FAAS determination of copper in the electrolyte, filter residues and precipitates (hydroxide separation method).....	9
8 Expression of results	10
9 Precision.....	10
9.1 Expression of precision	10
9.2 Method for obtaining the final result (see Annex B)	10
9.3 Precision between laboratories.....	11
9.4 Check of trueness.....	11
9.4.1 Type of certified reference material (CRM) or reference material (RM)	12
10 Test report	12
Annex A (normative) Procedure for the preparation and determination of the mass of a predried test portion	13
Annex B (normative) Flowsheet of the procedure for the acceptance of analytical values for test samples.....	15
Annex C (informative) Derivation of precision equations	16

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

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.

ISO 10469 was prepared by Technical Committee ISO/TC 183, *Copper, lead, zinc and nickel ores and concentrates*.

This second edition cancels and replaces the first edition (ISO 10469:1994), which has been technically revised.

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Introduction

ISO 10469:1994 underwent periodical review in 1999. Although the decision was made to confirm the International Standard at that time, significant comments were submitted by Japan. These comments were considered at a meeting of ISO/TC 183 in 2000, where it was agreed that Japan would re-draft ISO 10469 to indicate the proposed changes.

The most significant change was the elimination of the correction for impurities.

ISO/TC 183 agreed that the changes made do not warrant a new interlaboratory test programme. Details of the changes are as follows:

- a) Deletion of the determination of impurities in the deposited copper (7.9 in ISO 10469:1994).
- b) Adjustment of the expression of dissolution of the test portion according to ISO 10258:1994, *Copper sulfide concentrates — Determination of copper content — Titrimetric methods*.
- c) Adjustment of the expression of the sulfide separation method according to ISO 10258:1994.
- d) In the case of contained bismuth or tellurium, modification of the sulfide separation procedure. The method described in ISO 10469:1994 included a lot of copper in the iron hydroxide precipitation, which will lead to incorrect results. The method described in ISO 13658:2000, *Zinc sulfide concentrates — Determination of zinc content — Hydroxide precipitation and EDTA titrimetric method* has less copper in the iron hydroxide precipitation than the method described in ISO 10469:1994, so the method described in ISO 10469:1994 has now been modified with reference to ISO 13658.
- e) The procedure of treatment of the iron hydroxide precipitation (contained copper) is not given in ISO 10469:1994. The procedure of treatment has been added to the revised Standard.

Calibration solution A (4.34.1 in ISO 10469:1994) will be used in 7.7.1 (FAAS determination of copper in the filtrate of the sulfide precipitation). This filtrate contains iron ion, so calibration solution A should contain iron to achieve matrix matching. The preparation method of calibration solution A has been revised to include iron ion in the revised Standard.