AS 2863—2008

Australian Standard®

Copper, lead, zinc and nickel concentrates—Determination of mass loss of bulk material on drying

This Australian Standard® was prepared by Committee MN-005, Copper, Lead, Zinc and Nickel and Ores and Concentrates. It was approved on behalf of the Council of Standards Australia on 24 January 2008.
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The following are represented on Committee MN-005:

- CSIRO Minerals
- Minerals Council of Australia

Additional Interests:

- Minerals Industry Analytical Laboratories

This Standard was issued in draft form for comment as DR 07040.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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Australian Standard®

Copper, lead, zinc and nickel concentrates—Determination of mass loss of bulk material on drying

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PREFACE

This Standard was prepared by the Standards Australia Committee MN-005, Copper, Lead, Zinc and Nickel and Ores and Concentrates, to supersede AS 2863—1999, *Copper, lead and zinc sulfide concentrates—Determination of mass loss of bulk material on drying*.

The objective of this Standard is to provide those involved in the analysis of sulfide concentrates with a standardized method of determining the mass loss of bulk material on drying.

The objective of this revision is to adopt the latest edition of the corresponding International Standard.

This Standard is identical with, and has been reproduced from, ISO 10251:2006, *Copper, lead, zinc and nickel concentrates—Determination of mass loss of bulk material on drying*.

As this Standard is reproduced from an International Standard, the following applies:

(a) Its number appears on the cover and title page while the International Standard number appears only on the cover.

(b) In the source text 'this International Standard should read 'this Australian Standard'.

(c) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian Standards, as follows:

Reference to International Standard		*Australian Standard*	
ISO		AS	
9599	Copper, lead and zinc sulfide concentrates—Determination of hygroscopic moisture in the analysis sample—Gravimetric method	2816	Copper, lead and zinc sulfide concentrates—Determination of hydroscopic moisture in the analysis sample—Gravimetric method
12743	Copper, lead, zinc and nickel concentrates—Sampling procedures for determination of metal and moisture content	2862 2862.1	Copper, lead, zinc and nickel concentrates—Sampling Part 1: Sampling procedures for determination of metal and moisture content

The terms 'normative' and 'informative' have been used in this Standard to define the application of the annex to which they apply. A 'normative' annex is an integral part of a Standard, whereas an 'informative' annex is only for information and guidance.

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AUSTRALIAN STANDARD

Copper, lead, zinc and nickel concentrates — Determination of mass loss of bulk material on drying

WARNING — This International Standard may involve hazardous materials, operations and equipment. This International Standard does not purport to address all of the safety issues associated with its use. It is the responsibility of the user to establish appropriate health and safety practices and determine the applicability of regulatory limitations prior to use.

1 Scope

This International Standard specifies methods for the determination of moisture content of a lot of copper, lead, zinc or nickel concentrate, defined as the percentage mass loss of the moisture test portion under the conditions of drying specified in this document.

In order to obtain an unbiased estimate of the metal content of the lot, it is important that the same drying conditions are used for the determination of bulk and hygroscopic moisture or for preparing a predried test portion.

This International Standard is not applicable to drying samples used for determination of volatile elements such as mercury and sulfur. Such samples are allowed to dry at ambient temperature, and a hygroscopic moisture determination is carried out according to ISO 9599 at the time of chemical analysis.

2 Normative references

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

ISO 12743, *Copper, lead, zinc and nickel concentrates — Sampling procedures for determination of metal and moisture content*

3 Terms and definitions

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

3.1
representative sample
quantity of concentrate representing a larger mass of concentrate with both precision and bias within acceptable limits

3.2
lot
quantity of concentrate to be sampled

3.3
lot sample
quantity of concentrate that is representative of the lot