



GUIDE 30/Amd. 1

**Terms and definitions used in
connection with reference
materials**

Amendment 1

**Revision of definitions for
reference material and certified
reference material**

Second edition 1992

AMENDMENT 1 2008

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Foreword

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Amendment 1 to ISO Guide 30:1992 was prepared by the ISO Committee on reference materials (REMCO).

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Terms and definitions used in connection with reference materials

Amendment 1

Revision of definitions for reference material and certified reference material

Page 1, 2.1

Replace 2.1 with the following:

2.1 reference material RM

material, sufficiently homogeneous and stable with respect to one or more specified properties, which has been established to be fit for its intended use in a measurement process

NOTE 1 RM is a generic term.

NOTE 2 Properties can be quantitative or qualitative, e.g. identity of substances or species.

NOTE 3 Uses may include the calibration of a measurement system, assessment of a measurement procedure, assigning values to other materials, and quality control.

NOTE 4 A single RM cannot be used for both calibration and validation of results in the same measurement procedure.

NOTE 5 VIM has an analogous definition (ISO/IEC Guide 99:2007, 5.13), but restricts the term “measurement” to apply to quantitative values and not to qualitative properties. However, Note 3 of ISO/IEC Guide 99:2007, 5.13, specifically includes the concept of qualitative attributes, called “nominal properties”.

Page 1, 2.2

Replace 2.2 with the following:

2.2 certified reference material CRM

reference material characterized by a metrologically valid procedure for one or more specified properties, accompanied by a certificate that provides the value of the specified property, its associated uncertainty, and a statement of metrological traceability

NOTE 1 The concept of value includes qualitative attributes such as identity or sequence. Uncertainties for such attributes may be expressed as probabilities.

NOTE 2 Metrologically valid procedures for the production and certification of reference materials are given in, among others, ISO Guides 34 and 35.

NOTE 3 ISO Guide 31 gives guidance on the contents of certificates.

NOTE 4 VIM has an analogous definition (ISO/IEC Guide 99:2007, 5.14).

Page 7, Bibliography

Replace the existing bibliography with the following:

- [1] *International vocabulary of basic and general terms in metrology (VIM)*, BIPM, IEC, IFCC, ISO, IUPAC, IUPAP, OIML, 1993
- [2] ISO 3534-1:1993, *Statistics — Vocabulary and symbols — Part 1: Probability and general statistical terms*
- [3] ISO 3534-2:1993, *Statistics — Vocabulary and symbols — Part 2: Statistical quality control*
- [4] ISO 5725-1:1994/Cor 1:1998, *Accuracy (trueness and precision) of measurement methods and results — Part 1: General principles and definitions*
- [5] ISO Guide 31:1981, *Contents of certificates of reference materials*
- [6] ISO Guide 34:2000, *General requirements for the competence of reference material producers*
- [7] ISO Guide 35:1989, *Certification of reference materials — General and statistical principles*
- [8] ISO/IEC Guide 99, *International vocabulary of metrology — Basic and general concepts and associated terms (VIM)*