

**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

JJF 1005-2016

Replacing JJF 1005-2005

**General Terms and Definitions Used in Connection with
Reference Materials
(English Translation)**

Issued on: November 30, 2016

Implemented on: May 30, 2017

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine**

Table of Contents

Introduction (IV)	
1 Scope (1)	
2 References (1)	
3 Basic terms for reference materials (1)	
3.1 Reference material (1)	
3.2 Certificate of Reference (2)	
3.3 Reference material for reference material (2)	
3.4 Substrate reference material (2)	
3.5 Primary level measurement standard (3)	
3.6 Secondary measurement standard (3)	
3.7 International measurement standards (3)	
3.8 National measurement standards (3)	
3.9 Sample (3)	
3.10 Minimum sample size (3)	
3.11 (production) batch (3)	
3.12 (standard substance) setting (4)	
3.13 Assignment (4)	
3.14 Uniformity (4)	
3.15 Uniformity between units (4)	
3.16 Uniformity within the unit (4)	
3.17 Stability (4)	
3.18 Transport stability (4)	
3.19 Long-term stability (4)	
3.20 (standard material) life (4)	
3.21 (valid for standard substance) (5)	
3.22 Interchangeability (5)	
3.23 Matrix effect (5)	
3.24 Calibrator (5)	
3.25 Quality Control Substances (5)	
4 Criteria for measurement and testing of reference materials (5)	
4.1 (characteristic of the standard substance) (5)	
4.2 Quantity (5)	

- 4.3 Nominal characteristics (6)
- 4.4 Determination (6)
- 4.5 Indication value (6)
- 4.6 Measuring precision (6)
- 4.7 Measurement accuracy (6)
- 4.8 Accuracy of measurement (6)
- 4.9 Metrological traceability (7)
- 4.10 Inter-laboratory comparison (7)
- 4.11 Measuring method (7)
- 4.12 Measuring procedures (8)
- 4.13 Reference method (8)
- 4.14 Original reference measurement procedure (8)
- 4.15 Measurement Uncertainty (8)
- 4.16 Standard measurement uncertainty (8)
- 4.17 Synthetic Standard Measurement Uncertainty (9)
- 4.18 Extended Measurement Uncertainty (9)
- 4.19 Include Probability (9)
- 4.20 Contains factor (9)
- 4.21 Measurement comparability of measurement results (9)
- 4.22 Measurement Compatibility of Measurement Results (9)
- 4.23 Confirmation (10)
- 5 Criteria for the identification and publication of reference materials (10)
 - 5.1 Identification of reference materials (10)
 - 5.2 Certificate of Reference Material (10)
 - 5.3 Criteria for substance identification report (10)
 - 5.4 Product information list (10)
 - 5.5 Development of standard materials (production) institutions (10)
 - 5.6 Subcontractors (10)
 - 5.7 (standard substance) development (production) (11)
- 6 Statistical terms related to the determination of standard substances (11)
 - 6.1 Sampling (11)
 - 6.2 Sample Size (11)
 - 6.3 Representative samples (11)
 - 6.4 Simple random sampling (11)
 - 6.5 Stratified sampling (11)

- 6.6 Simple random sampling (12)
- 6.7 (characteristic) distribution (12)
- 6.8 Independent Test/Measurement Results (12)
- 6.9 Repeatability measurement conditions (12)
- 6.10 Reproducibility measurement conditions (12)
- 6.11 Target value (12)
- 6.12 Uncertainty of target measurement (12)

3.10 Minimum sample size (3)

- 3.11 (production) batch (3) 3.12 (standard substance) setting (4)

3.19 Long-term stability (4)

- 3.20 (standard material) life (4) 3.21 (valid for standard substance) (5)

4 Criteria for measurement and testing of reference materials (5)

4.1

- (characteristic of the standard substance) (5)

5.6 Subcontractors (10)

- 5.7 (standard substance) development (production) (11)

6.6 Simple random sampling (12)

- 6.7 (characteristic) distribution (12)

6.12 Uncertainty of target measurement (12)

Chinese Index (13)

English Index (15)

Introduction

This specification is a revision of the JJF 1005-2005 Terminology and Definitions of Common Reference Materials.

This specification takes precedence over JJF 1001-2011 "General Metrology Terms and Definitions" and ISO/IEC Guide 99.

2007 "Common Metrics in International Metrology Basis General Concepts and Related

Terms (VIM)", " Standard substance "; replace the ISO guidelines with the terms" ordinal
"and" nominal characteristics "in VIM 30.

The term "property property" in the "Selected Terms and Definitions of Standard
Substance", and the modification uses the definition of "attribute value" in ISO Guide
30..2015. The specification uses ISO guidelines 30..2015 in all other terms, to ensure
consistency of the full text, ISO Guide 30..2015 terms defined in the "(Attribute) value or
attribute" collectively referred to in this specification "(the characteristic value of the
standard substance). The specification was collected at the same time GB/T 3358.2-2009
"Statistical vocabulary and symbols Part 2. Application statistics", GB/T 21415-2008 "In
vitro Diagnostic Medical Devices Quantitative Measurement of Biological Samples
Calibrating Traceability of Calibrated and Controlled Substances" as well as other relevant
terms and definitions in JJF 1001-2011 and ISO/IEC Guide 99..2007.

In this revision, in the premise of ensuring that VIM is substantially equivalent, some of the
terms in JJF 1001-2011 (Including note) of the contents of the modified and added,
including the standard material, a certified reference material, measurement accuracy,
measured Quantitative accuracy, measurement precision, repeatability measurement
conditions, metrological traceability, measurement methods, measurement procedures, Test
procedure, synthetic standard measurement uncertainty, extended measurement
uncertainty, inclusion probability, inclusion factor, measurement the measurement of the
results of the comparability of the measurement results of the measurement compatibility;
part of the term definition in parentheses given the original English Part of the term, such
as interchangeability, calibration, standard material development (production) institutions in
the definition of the addition of the Notes;

The definition of the word order, the nominal character, and the addition of an example in
the art.

This specification retains the JQF1005-2005 Terminology and Definitions in Reference
Materials.

(To the basic terms of reference material), the standard substance measurement and
testing related terms, the reference substance identification and release related surgery in
the three chapters of the language, the original terms attached to the original appendix A
were added, and the fourth category was added.

Learn related terms. JJF 1005-2005 The text and appendix contains a total of 46 terms, this
amendment to increase to 67, the deletion of the proposed value, undetermined value, the
adoption of the reference value, the uncertainty of the determination of the baseline
reference material, Benchmark (measurement) method, reference (measurement) method,
confirmed (measurement) method, accreditation mechanism, confidence level,
Repeatability of measurement results, reproducibility of measurement results, systematic
errors, random errors and other terms. According to international standards Material and