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

GB/T 17433-2014

Replacing GB/T 17433-1998

**Foundation terms for chemical analysis of metallurgical
products**

冶金产品化学分析基础术语

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

This standard replaces GB/T 17433-1998 "metallurgical products chemical analysis of the term." This standard and GB/T 17433-1998 phase

Ratio, the main changes are as follows.

--- Remove the "reference standard";

--- 2.1 "General" increased detection, parallel determination, volume, value, quality, mass fraction, volume fraction, atom%, the basic single

Yuan, relative atomic mass, relative molecular mass, concentration, purity, content, background equivalent concentration calibration (see 2.1.2, 2.1.4,

2.1.8, 2.1.9, 2.1.10, 2.1.11, 2.1.12, 2.1.13, 2.1.15, 2.1.17, 2.1.18, 2.1.21, 2.1.24, 2.1.25, 2.1. 30,

2.1.32); revised chemical analysis, measurement, detection limit, the amount of substance, molar mass, sensitivity, detection limit, the calibration curve, standard

Quasi-added method, ambient temperature and pressure

(2.1.1, 2.1.3, 2.1.7, 2.1.14, 2.1.22, 2.1.23, 2.1.29, 2.1.33, 2.1.38, 2.1.39, 2.1.40);

--- 2.2 "Analysis" added iodometry, non-aqueous titration [method], Karl Fischer titration [method], electrolytic method, rare isotope

Release mass spectrometry, glow discharge mass spectroscopy, Kjeldahl method, ion chromatography analysis of trace components (2.2.2.6, 2.2.2.11,

2.2.2.12, 2.2.2.25, 2.2.2.34, 2.2.2.36, 2.2.2.42, 2.2.2.44, 2.2.4.4); amended by the purpose of the task, according to the principle,

Weighing Analytical [method], fire assay, according to the test quantity, in a sample of mass fraction of component being tested by the analysis of trace components as required

(2.2.1, 2.2.2, 2.2.2.3, 2.2.2.38, 2.2.3, 2.2.4, 2.2.4.3, 2.2.5) and other entries;

--- 2.3 "sample" in the revised sampling, sample preparation, quartering

(2.3.1.1,2.3.1.2,2.3.1.4);

Increase --- 2.4 "agents" in the standard reference material, mixed indicator, surfactants, emulsifiers, coagulant (2.4.1.3,2.4.2.6,

2.4.3.12,2.4.3.13,2.4.3.14); revised standard material/standard sample certification (certified) reference material/standard samples, standard

Standard solution, the standard stock solution, the calibration gas, water, ultrapure water (2.4.1.1,2.4.1.2,2.4.1.6,2.4.1.7,2.4.1.12, 2.4.3.5,2.4.3.7);

1 Scope

This standard specifies the chemical analysis of metallurgical products basic terminology.

This standard applies to the preparation of metallurgical products for chemical analysis of national standards, industry standards, corporate standards. Preparation of technical documents, books and school

Operation and exchange of technology can also be applied in business dealings.

2.1.1 Chemical analysis chemicalanalysis

Get chemical composition from the material, shape and the presence of technical information.

2.1.2 Detection detection

Confirm the specific nature of the sample and determining the presence or absence of a substance in the operation.

2.1.3 Determination of determination

Get all of the operations of a substance characteristic values \u200b\u200bexperimentally.

2.1.4 Parallel determination paraleldetermination

Take several samples of the same measurement carried out simultaneously under the same operating conditions.

2.1.5 Measurement range rangeofdetermination

Method for determination of the lower limit to the range of measurement caps.

2.1.6 Determination limit maximumlimitofdetermination

The actual method of analysis can be determined to a certain maximum amount or concentration of the components.

Detection limit (limit of determination, the limit of quantification)

minimum limit of determination [limit of determination, quantification limit]

The minimum amount or concentration can be determined to the actual analysis of the particular component. International Union of Pure and Applied Chemistry (IUPAC) requirements to

10 times the standard deviation of the blank signal values corresponding to the concentration (or mass) for the determination of the lower limit, also known as the limit of determination. 1997 adopted by the IUPAC

"Analysis of the term Outline", the limit of determination renamed the limit of quantification.

2.1.8 Quantity quantity

Physical short. Phenomenon, body or substance that may be distinguished qualitatively and quantitatively determined by an attribute.