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

GB/T 13966-2013

Replacing GB/T 13966-1992

Terminology for analytical instruments

分析仪器术语

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Table of Contents

Foreword	III
1 Scope	1
2 Basic terms	1
3 Electrochemical analysis instruments	10
4 Optical analysis equipment	21
5 Thermal analytical instruments	31
6 MS	43
7 Spectroscopic instrument	60
8 Chromatograph	64
Ray spectroscopy and analytical instruments 9	82
10 Properties of the instruments	92
11 Other analytical instruments and auxiliary devices	96
Chinese Index	100

Foreword

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

This standard replaces GB/T 13966-1992 "Analytical Instruments terms"

This standard and GB/T 13966-1992 of the major changes.

--- Supplemented formula ID;

--- Remove the repeatability error, independent linearity, terminal based linearity, zero-based linearity and general gas chromatograph;

--- Revised macro analysis, trace analysis, the true value of the quantity, standard deviation, coefficient of variation, repeatability, dielectric strength, the correction value, the random error

Poor, the system error, stripping polarography, flame emission spectrometry, atomic absorption spectrometry, atomic fluorescence spectrometry, infrared spectroscopy,

Fourier transform infrared spectroscopy, polarimetry, electromagnetic radiation, Lambert - Pogue law, Beer's law, the Raman spectrum, the dilution factor, scattered

Shoot, spectrophotometer, polarimeter, photomultiplier tubes, absorption cell, spectral bandwidth, spectral resolution, line dispersion rate, the line dispersion rate,

Stray radiation, stray radiation rate, wavelength positioning accuracy, wavelength repeatability positioning, spectrophotometry heat, thermal conductivity, mass spectrometry, chromatography,

High performance liquid chromatography flame ionization detector, an alkali flame ionization detector, ambient gas analyzers, water quality analyzer;

--- Increase the ground resistance, protective grounding, semi-micro analysis, ultra trace analysis, ultra trace analysis, the absorption law, paramagnetic oxygen analyzer

, Magnetic mechanical oxygen analyzer, a magnetic pressure type oxygen analyzer, oxygen analyzer magnetic mechanical sensors, magnetic pressure type oxygen sensor analysis,

The glass transition temperature, crystallization temperature, melting temperature, linear expansion coefficient, enthalpy, biological mass spectrometry, high pressure liquid chromatography, RP

High performance liquid chromatography with pulsed flame photometric detector, the mass spectrometer, Fourier transform infrared detector, a photodiode array detector

Detector, (laser) light scattering detector, syringe pumps, peristaltic pumps, chromatography data, chromatography data workstations, Particulate Monitor, Atmospheric

Pollution monitoring systems, analyzer houses, flue gas continuous emission monitoring systems, the cutter, laboratory analysis instruments, mobile analytical instruments, they

Portable analytical instruments and on-line analytical instruments;

1 Scope

This standard specifies the basic terminology commonly used analytical instruments and electrochemical analytical instruments, optical analysis equipment, thermal analyzers

, A mass spectrometer, spectroscopy instruments, chromatography instruments, ray spectroscopy and analytical instruments, physical analytical instruments, analytical instruments and other auxiliary devices

Terms and definitions.

This standard applies to analytical instruments.

Under this standard bracketed word in [] is without confusion, can be omitted the word; the word (inside) indicated in parentheses addition, the former Synonymous.

2.1 Instrumental Analysis instrumentalanalysis

Instruments as a means of analyzing substances qualitative and quantitative structure and status and the like.

2.2 Qualitative analysis qualitative analysis

Detected in a sample element analysis functional group composition or mixture carried out.

2.3 Quantitative analysis quantitative analysis

Analysis of a sample of the various components (such as elemental, roots or functional groups, etc.) of the determination carried out.

2.4 Constant analysis macroanalysis

Generally refers to the quality of the sample is greater than 0.1g analysis, it can also mean the measured component amount higher than one thousandth of analysis.

2.5 Semi microanalysis semimicroanalysis

Generally refers to the quality of the analysis sample of between 10mg ~ 100mg.

2.6 Microanalysis microanalysis

Generally refers to the quality of the analysis sample at between 1mg ~ 10mg, and may also refer to the tested component content is about one ten thousandth of a millionth analysis.

2.7 Ultra trace analysis ultramicroanalysis

Generally refers to the quality of the sample is less than 1mg or less than 0.01mL of sample volume analysis.

2.8 Trace Analysis traceanalysis

Material component being tested mass fraction is less than 0.01% of the analysis, it can also mean analysis component content measured in parts per million or less.

2.9 Ultra-trace analysis ultra-traceanalysis

Material component being tested mass fraction is less than 0.0001% of the Analysis.