

ICS 17.240

CCS F87



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

GB/T 10256-2013

Replacing GB/T 10256-1997

Radioactivity meter

放射性活度计

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Quarantine of the People's Republic of China;
Standardization Administration of China**

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. This standard replaces GB/T 10256-1997 "radioactivity meter" and GB/T 10256-1997 compared to the main changes are as follows:

- Normative references have been deleted standard abolished, updated version of the standard reference, an increase of EJ/T 1059 and other lead Standard;
 - Rated conditions of use in increasing the DC power requirements (see 5.1);
 - Removed ^{113m}In other nuclei, increased ^{18}F , ^{11}C , ^{13}N and other nuclides (see 4.2);
 - Revised requirements relative intrinsic error performance requirements (see 4.2);
 - Affect the amount of change in Table 3, Table 4 and
- 4.6 into one table a comprehensive description of the changes affect the amount requested, the instrument temperature, humidity According to the internal temperature of the test requirements GB/T 8993-1998 standard laboratory equipment in the humidity has been revised (see 4.3);
- Specifies the sources and methods of measurement based on the upper limit of the evaluation activity meter measuring range (see 5.8);
 - Provides DC power supply activity meter electrical safety requirements (see 4.4.1);
 - Specifies the energy range used for the measurement of the amount of radionuclides requirements (see 5.4);
 - Source oversight requirements moved to Chapter 7 (see 7.6);
 - Delivery inspection inspection rules in the measurement limit modify elected to do, others do not check the original entries to choose to do the project (see Table 6). The standard proposed by China National Nuclear Corporation. This standard by the National Nuclear Instrument Standardization Technical Committee (SAC/TC30) centralized. This standard was drafted. nuclear (Beijing) Nuclear Instrument Factory. The main drafters of this standard. Yangbin Hua, Yang Suhua, Zhu Zhihong, Ning Xiaoyong. Radioactivity meter

1 Scope

GB/T 10256-2013 is the Chinese national standard on radioactivity meter, in the field of metrology and measurement. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 11 December 2012 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 July 2013. Classification: ICS 17.240, CCS F87. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the radioactivity meter (hereinafter referred to as activity meter) technical requirements, test methods, inspection rules, marking, packaging, transportation, Storage, requires accompanying documents and routine inspections. This standard applies to the well-type ionization chamber of the pneumatic detectors activity meter.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB 4075-2009 Sealed radioactive sources - General requirements and classification

GB/T 8993-1998 nuclear instruments - Environmental conditions and testing procedures

GB/T 10257-2001 nuclear instruments and nuclear radiation detectors Quality inspection rule

GB 11806-2004 safe transport of radioactive materials regulations

GB/T 19661.1-2005 nuclear instrumentation General requirements for safety EJ/T

1059-1998 nuclear instrumentation packaging General technical requirements

JJG377-1998 radioactivity meter

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 For measuring the activity of radioactive sources and equipped with a device indicating or recording instruments.

3.2 Well type ionization chamber wel-typeionizationchamber Within for nearly 4pi solid

angle range measurement radiator radioactivity ionization chamber. In the center of the ionization chamber has a cylindrical Well, the source under test is placed in the well. 4.

Technical Requirements

4.1 appearance and mechanical properties Appearance and mechanical properties of the activity meter should meet the following requirements.

- a) activity meter of the surface coating should be smooth and firm, there should be no rust, cracks, spalling and other defects;
- b) writing on the nameplate and the panel should be clear;
- c) control mechanism should be flexible, reliable fastening parts should be no loose.

4.2 Performance Characteristics Activity meter according to the performance characteristics are divided into grade I and II grade, performance characteristics at reference conditions shown in Table 1.