

ICS 07.080
CCS A 40



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

GB/T 46408-2025

**Specification on data management and publication in microbial
resource centers**

微生物资源机构数据管理及发布规范

(English Translation)

Issued on: October 5, 2025

Implemented on: October 5, 2025

Issued by: State Administration for Market Regulation

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document adopts ISO 21710:2020 "Data management and publication specifications for biotechnology microbial resource institutions".

The following minimal editorial changes have been made to this document.

---To align with existing standards, the standard's name has been changed to "Specification for Data Management and Publication of Microbial Resource Institutions";

---Added a note stating "Operations shall be conducted in accordance with the management documents issued by the Ministry of Ecology and Environment and other relevant national management departments" (see 5.4);

---Added the Chinese Science and Technology Resource Universal Identifier "CSTR" (see 5.5.1.1);

---The example in Geographical Origin has been modified (see A.3.1);

---Added Appendix NA (Informative) Abbreviations.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the Ministry of Science and Technology of the People's Republic of China.

This document is under the jurisdiction of the National Technical Committee on Standardization of Science and Technology Platforms (SAC/TC486).

Introduction

Microbial strains are important materials for scientific research and production. However, different microbial resource institutions use different data formats.

This method of internal data management and distribution severely hinders efficient global data exchange and affects users' access to preserved resources and related information.

Their visits have hindered the further utilization of microbial resources by the academic community and the bio-industry.

This document represents the domestic implementation of ISO 21710:2020, providing a set of data fields for data publishing, aiming to facilitate application...

Improving data exchange between online directories of microbial resource institutions

through unique identifiers and standardized data formats, and facilitating the promotion of microbial-based...

Subsequent access to materials and related data, and benefit sharing. This document also specifies data management and internal data quality control requirements to improve...

The overall accuracy and reliability of data and information recorded in high microbial resource institutions are the foundation for efficient data sharing and exchange.

Microbial Resource Institution Data Management and Publication Standards

1 Scope

This document specifies the requirements for data management and publication by microbial resource institutions to achieve a consistent data format and outlines quality control standards.

The workflow aims to improve overall data quality and promote the sharing and integration of microbial materials and related data among microbial resource organizations.

This document aims to facilitate procedures for access, acquisition, authentication, preservation, storage, and distribution, for use by microbial resource organizations, regulatory bodies, and others.

It can be used by peers to evaluate the data management and dissemination capabilities of microbial resource organizations.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

GB/T 37864-2019 General requirements for the quality and competence of biobanks (ISO 20387:2018, IDT)

3 Terms and Definitions

The following terms and definitions apply to this document.

Registration Accessioning Record newly added microbial materials and/or data related to microbial resource institutions.

[Source. GB/T 37864-2019, 3.1, with modifications] 3.2 Acquisition the act of acquiring

ownership of microbial materials or associated data resources.

[Source. GB/T 37864-2019, 3.2, with modifications] 3.3 Associated data all information relating to microbial materials, including but not limited to collection, classification, preservation records and depositor information.

[Source. GB/T 37864-2019, 3.3, with modifications] 3.4 authentication by using specific technical means or literature records to determine the properties of microbial materials at a certain level, the foundation for the usability of the materials can be laid.

[Source. GB/T 37864-2019, 3.4, with modifications] 3.5

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This includes a systematic list or record of descriptive information.

Note: Includes both print and online catalogs.

[Source. GB/T 37864-2019, 3.10]