INTERNATIONAL MI. Microflu. **STANDARD**

ISO 10991

Second edition 2023-09



Reference number ISO 10991:2023(E)



© ISO 2023

tation, no part of 'including plot' 'om either'. All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

Contents		Page
Fore	eword	iv
1	Scope	1
2	Normative references	
3	Terms and definitions	1
	3.1 General terms, relevant to microfluidics	
	3.2 Terms related to microfluidic flow	
	3.4 Terms related to modularity	
Bibl	liography	14
Inde	ex	15
	Chris do policy of the state of	
@ 100	0.2022 All wights recovered	iii

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 48, *Laboratory equipment*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 332, *Laboratory equipment*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 10991:2009), which has been technically revised.

The main changes are as follows:

- title has been changed;
- several terms have been added to reflect the increased uptake of microfluidic technology.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Microfluidics — Vocabulary

1 Scope

This document provides terms and definitions for micro process engineering and microfluidics applied in medical and veterinary diagnostics, chemistry, agriculture, pharmacy, biotechnology and the agrifood industry, as well as other application areas.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at https://www.iso.org/obp
- IEC Electropedia: available at https://www.electropedia.org/

3.1 General terms, relevant to microfluidics

3.1.1

biocompatibility

special quality of some materials allowing them to come into contact with biological materials without changing the materials' bioactivity

3.1.2

biomarker

biological molecule found in blood, other body fluids or tissues that is used to identify a disease or monitor the progression of a disease

3.1.3

classification

method of sorting into categories

[SOURCE: ISO 5492:2008, 4.5]

3.1.4

end-user

person or persons who will ultimately be using the *system* (3.1.15) for its intended purpose

[SOURCE: ISO/IEC 19770-5:2015, 3.13, modified — Note 1 to entry has been removed.]

3.1.5

hydrophilic

characterised by affinity to water established by hydrogen bonding

3.1.6

hydrophobic

characterised by being repelled from a mass of water