INTERNATIONAL STANDARD

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In vitro diagnostic medical devices — Information supplied by the manufacturer (labelling) —

Part 4: In vitro diagnostic reagents for self-testing

Dispositifs médicaux de diagnostic in vitro — Informations fournies par le fabricant (étiquetage) —

Partie 4: Réactifs de diagnostic in vitro destinés aux autodiagnostics

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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

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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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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 212, *Clinical laboratory testing and in vitro diagnostic test systems*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 140, *In vitro diagnostic medical devices*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 18113-4:2009), which has been technically revised.

The main changes are as follows:

— Updated text to reflect changes in regulations and provide examples for clarity;

— Added information pertaining to unique device identifier-device identifier (UDI);

— Updated the Bibliography.

A list of all parts in the ISO 18113 series can be found on the ISO website.

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.

Introduction

Manufacturers of in vitro diagnostic (IVD) reagents for self-testing, supply users with information to enable the safe use and expected performance of their devices. The type and level of detail varies according to the intended uses and country-specific regulations.

The International Medical Devices Regulatory Forum (IMDRF) encourages convergence of the evolution of regulatory systems for medical devices at the global level. Eliminating differences among regulatory jurisdictions can allow patients earlier access to new technologies and treatments. This document provides a basis for the harmonization of labelling requirements for IVD reagents for self-testing.

This document is concerned solely with information supplied with IVD reagents, calibrators and control materials intended for self-testing. It is intended to be used in conjunction with ISO 18113-1, which contains the general requirements for information supplied by the manufacturer and definitions of general labelling concepts.

This document is intended to support the essential labelling requirements of all the IMDRF [8] partners, as well as other countries that have enacted or plan to enact labelling regulations for IVD medical devices.

For IVD reagents, calibrators and/or control materials that are intended to be used as a system with an instrument provided by the same manufacturer, this document is also intended to be used together with ISO 18113-1 and ISO 18113-5.

In vitro diagnostic medical devices — Information supplied by the manufacturer (labelling) —

Part 4: In vitro diagnostic reagents for self-testing

1 Scope

This document specifies requirements for information supplied by the manufacturer of in vitro diagnostic (IVD) reagents, calibrators, and controls intended for self-testing.

This document can also be applicable to accessories.

This document is applicable to the labels for outer and immediate containers and to the instructions for use.

This document does not apply to:

a) IVD instruments or equipment;

b) IVD reagents for professional use.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 14971, *Medical devices — Application of risk management to medical devices*

ISO 15223-1, *Medical devices — Symbols to be used with information to be supplied by the manufacturer — Part 1: General requirements*

ISO 18113-1, *In vitro diagnostic medical devices —Information supplied by the manufacturer (labelling) — Part 1: Terms, definitions and general requirements*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 18113-1 apply.

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/

4 General

4.1 Essential requirements

The requirements of ISO 18113-1 apply. For the use of symbols, the requirements of ISO 15223-1 apply.

ISO standards, e.g. ISO 15197 and ISO 17593, for specific IVD medical devices also contain requirements for information supplied by the manufacturer.

4.2 Identification of kit components

In the case of a kit, each component shall be identified by name, letter, number, symbol, colour, or graphics in the same manner on all labels and in the instructions for use.

NOTE A unique device identifier (UDI) is not needed on the immediate label of kit components unless the component is a device in its own right.

4.3 Presentation of the instructions for use

4.3.1 The instructions for use shall be written or provided in a language that is easily understood and applied by a lay person, and where appropriate, supplemented with drawings and diagrams and/or video.

Some devices can require separate information for the healthcare professional.

4.3.2 The information supplied shall be sufficient to enable a lay person to use the IVD reagent safely and properly, to confirm that the device is operating or has operated as intended, to understand the IVD examination results and follow up actions and/or recommendations.

NOTE Recommendations for developing user instruction manuals for IVD medical devices used in home health care are found in Reference [9].

5 Content of the outer container

5.1 Manufacturer

The name and address of the manufacturer shall be given. The address indicates a single point at which the manufacturer can be contacted, e.g. street, number, city, postal code and country. If a full address is not practical, an abbreviated version can be sufficient provided the full address is included in the instructions for use.

If an Authorised Representative is acting on behalf of the manufacturer in the country/jurisdiction, whether the regulatory authority having jurisdiction requires that the label shall also contain the address of the Authorised Representative. should be taken into consideration .

5.2 Identification of the IVD reagent

5.2.1 IVD reagent name

The name or trade name of the IVD reagent shall be given. This brand or trade name should allow its differentiation from other products of the same or similar type.

When the name does not uniquely identify the IVD reagent, an additional means of identification shall also be given.

EXAMPLES Catalogue number, commodity number.

5.2.2 Batch code / lot number

A batch code/lot number shall be given.

If a kit contains different components bearing different batch codes, the batch code indicated on the outer container shall enable the individual batch code of each component to be traced from the manufacturer's production record.

5.2.3 Unique device identifier (UDI)

It should be taken into consideration that if an IVD reagent is subject to unique identification rules by the regulatory authority, the outer label should provide the UDI including the UDI carrier (Automatic Identification Data Carrier 'AIDC' format), and Human Readable Interpretation (HRI).

When AIDC carriers other than the UDI carrier are part of the product labelling, the UDI carrier shall be readily identifiable.

The UDI shall include both the UDI device identifier (UDI-DI) and the UDI production identifier (UDI-PI); specific exemptions which are provided by regulations should be taken into consideration.

For the IVD reagent, the UDI-PI shall include at least the batch code and the expiry date.

If there also is a manufacturing date on the label for reasons other than batch control purposes, it does not need to be included in the UDI-PI; specific requirements provided by regulations should be taken into consideration.

If there are significant constraints limiting the use of both AIDC and HRI on the label, the AIDC format shall be generally preferred except for environments where HRI is more appropriate to the user.

The UDI carrier should be readable during normal use, storage conditions, and throughout intended life of the IVD reagent. ISO/IEC 15415 should be referred to for bar code specifications and symbol quality criteria.

Local, national or regional regulations can apply.

NOTE 1 The content, format, and size of the UDI is specified by the accredited UDI issuing agency selected.

NOTE 2 HRI text is not the same as the text that is already placed on the label and is a legible interpretation of the data characters encoded in the UDI carrier.

5.3 Contents

The net quantity of contents expressed in terms of mass, volume, volume after reconstitution, numerical or a combination of these or other terms that accurately reflect the contents shall be indicated.

5.4 Intended use/Intended purpose

If the intended use is not indicated by the name of the IVD reagent, then an abbreviated intended use that contains enough detail for the user to identify the device and its use shall be given. A full intended use statement shall be included in the instructions for use in terminology suitable for a lay person.

EXAMPLES Pregnancy test, HIV-1 antibody test.

The fact that the IVD reagent is intended for self-testing shall be clearly indicated.

NOTE In some countries, authorities having jurisdiction can set local requirements for the content of the intended use statement.

5.5 In vitro diagnostic use

The IVD use of the reagent shall be indicated in terminology suitable for a lay person.

EXAMPLE Only for use outside the body.

5.6 Storage and handling conditions

The storage conditions and, if necessary, the handling conditions required to maintain the stability and performance of the reagents, calibrators, and control materials in the unopened state shall be indicated in terminology suitable for a lay person.

EXAMPLE 1 2 °C to 8 °C or 2…8 °C or graphical symbol; –18 °C or below or graphical symbol.

Other conditions that affect stability shall be indicated.

EXAMPLE 2 Light, humidity (e.g. store in a cool, dry environment).

Any other conditions that affect the handling or storage of the reagents, calibrators and control materials shall be specified.

EXAMPLE 3 Fragile, do not shake.

5.7 Expiry date

An expiry date based upon the stated storage instructions shall be indicated.

Expiry dates shall be expressed in a format generally familiar to the lay person.

EXAMPLE Formats 2007–05–01, 2007-May–01, May 01, 2007.

If only the year and month are given, the expiry date shall be the last day of the month indicated.

The label on the outer container shall indicate the expiry date of the component having the earliest expiry date or an earlier date.

Local, national or regional regulations can apply.

5.8 Warnings and precautions

If an IVD reagent is considered hazardous, the outer container label shall include the appropriate hazard pictogram(s). The appropriate signal words, product identifiers, hazard statements and precautionary statement should be included. However, where there is insufficient space, the hazard pictograms shall be given on the outer container label and the other information shall be given in the instructions for use.

EXAMPLES Chemical and biological hazards.

Statements or warning pictograms or symbols for specific hazards can be required by local, national or regional regulations.

If pictograms or symbols are used, text explaining the meaning of the pictogram or symbol shall be provided in the instructions for use if the label space does not allow the text to be included.

6 Content of the immediate container label

6.1 General provisions

6.1.1 Single container

If the immediate container is the outer container, the requirements specified in Clause 5 apply.

6.1.2 Small label

If the available space on the immediate container label is too small to include all of the information listed below, the information about contents (6.4), in vitro diagnostic use (6.5) and storage and handling conditions (6.6) may be abbreviated or eliminated.

Local, national or regional regulations can apply.

6.2 Manufacturer

The manufacturer shall be identified. The name of the manufacturer or an unequivocal trade name or logo is sufficient.

6.3 Identification of the IVD reagent

6.3.1 IVD reagent or component name

The name shall ensure proper identification to the user of the IVD reagent or component.

6.3.2 Batch code/lot number

A batch code/lot number shall be given.

6.3.3 Unique device identifier (UDI)

Whether a UDI is required by the regulatory authority should be taken into consideration. If so, the UDI should be included as specified in 5.2.3.

It is possible that the UDI on the immediate container label will not be the same as the UDI on the outer container. Refer to applicable regulations and issuing agencies for requirements.

6.4 Contents

If not indicated by other means, the contents shall be specified.

EXAMPLES Mass, volume and/or the number of examinations.

6.5 In vitro diagnostic use

The IVD use of the reagent shall be stated in terminology suitable for a lay person.

EXAMPLE Only for use outside the body.

6.6 Storage and handling conditions

The storage conditions necessary to maintain stability of the reagents, calibrators and control materials in the unopened state shall be indicated.

Any other conditions that affect the handling or storage of the reagents, calibrators and control materials shall be given, if different from those given on the outer container.

EXAMPLE Fragile.

6.7 Expiry date

An expiry date based upon the stated storage instructions shall be expressed as specified in 5.7.

6.8 Warnings and precautions

If an IVD reagent is considered hazardous, the immediate container label shall include the appropriate hazard pictogram. The appropriate signal words, product identifiers, hazard statements and precautionary statements should be included. However, where there is insufficient space, the hazard pictograms shall be given on the immediate container label and the other information shall be given in the instructions for use.

EXAMPLES Chemical and biological hazards.

Statements or warning symbols for specific hazards can be required by local, national or regional regulations.

7 Content of the instructions for use

7.1 Manufacturer

The name, registered trade name or registered trade mark and address of the manufacturer shall be given, e.g. street, number, city, postal code, country. A telephone number and/or fax number and/or website address to obtain technical assistance shall be provided.

If an Authorised Representative is acting on behalf of the manufacturer in the country/jurisdiction, whether the regulatory authority having jurisdiction requires the instructions for use to contain the address of the Authorised Representative, should be taken into consideration.

7.2 Identification of the IVD reagent

The name or trade name of the IVD reagent shall be indicated.

If the name does not uniquely identify the IVD reagent, an additional means of identification shall also be provided.

EXAMPLES Catalogue number, commodity number.

7.3 Intended purpose/Intended use

The intended purpose shall be described in appropriate detail, including, where appropriate, the measurand, primary sample type, patient population and its function, in terminology suitable for a lay person.

Benefits and limitations of the IVD medical device with respect to the intended purpose shall be described, where appropriate.

The description shall provide sufficient information to enable the user to understand the medical context and to allow the intended user to make a correct interpretation of the results.

EXAMPLE Self-testing of cholesterol, suitable for the demonstration of an elevated cholesterol, but not for its monitoring.

The fact that the IVD reagent is intended for self-testing shall be clearly indicated.

7.4 Principles of the method

The principle of the examination method shall be briefly described, in terminology suitable for a lay person, to provide the user with the necessary basic information. This includes details of the test procedure, including any reagent preparation, specimen collection and or preparation and information on how to run the test and interpret the results. The type of specimen required to perform the test (e.g. saliva, blood, urine) shall be stated.

Specific particulars can be omitted as long as the other information given by the manufacturer is sufficient to enable the user to use the device and to understand the result(s) produced by the device.

7.5 Traceability of values assigned to calibrators and trueness-control materials

The metrological traceability of values assigned to calibrators and trueness-control materials shall be described including identification of applicable reference materials and/or reference measurement procedures.

Information shall be provided regarding maximum (self-allowed) batch to batch variation due to the manufacturer's calibration value assignment methodology of the end user control and calibrator material. This may be understood as providing a value which links the primary reference material set to the end user calibrator and control materials.

The value, the uncertainty value derived for the customer calibrator and or customer control and the level of bias due to the process which can be expected, may be stated. The manufacturer may provide uncertainty as a range of values within which the true value lies with a specified level of confidence; this can be expressed as, eg: 9,8 XX/YY to 10,2 XX/YY, OR as 10,0 XX/YY ± 0,2 XX/YY, OR as 10,0 XX/YY ± 2 %, with AA% Confidence.

In addition to the information specified in the instructions for use, the manufacturer can choose to make additional information available through other documents or upon request.

NOTE 1 ISO 17511 describes the traceability of values assigned to calibrators and trueness-control materials, to reference materials and/or to reference measurement procedures of higher order.

NOTE 2 'control material' is only included if it is used to verify the trueness of measurements, while precision control materials and control materials to which intervals of values per method/manufacturer have been assigned are outside the scope and then ISO 17511 does not apply.

References to relevant scientific literature or other available documentation of the reference measurement procedure or reference material should be provided.

Local, national or regional regulations can apply.

7.6 Components

A list of all components/materials provided including the nature, number, amount, concentration or content of the reactive ingredients, shall be given.

EXAMPLE 1 Antibody.

Information concerning other ingredients that can influence the examination procedure shall be given.

EXAMPLE 2 Buffer.

7.7 Additional required equipment and / or materials

Any special equipment and/or materials required for proper performance and safe use of the IVD medical device but not provided by the manufacturer shall be listed.

Information necessary to enable special equipment to be identified and connected for proper use shall be given.

EXAMPLE 1 Timing device, absorbent material, sterile or clean tissue required to cover the puncture site, reagent preparation.

All steps required for preparation of the reagent(s) shall be described in a language suitable for a lay person supplemented by drawings or pictures, where appropriate.

EXAMPLE 2 Mixing, bringing to room temperature, whether tap (chlorinated) water is satisfactory or not.

7.8 Storage and shelf life after first opening

The storage conditions and shelf life following the first opening of the immediate container shall be given if different from the storage conditions and shelf life given on the container label.

The storage conditions and stability of working reagents, calibrators and control materials shall be given.

7.9 Warnings and precautions

Information shall be given in the form of warnings, precautions and/or measures to be taken:

— in the event of malfunction of the device or its degradation as suggested by changes in its appearance that can affect performance;

— as regards the exposure of the reagent(s) to reasonably foreseeable external influences or environmental conditions, e.g. magnetic fields, external electrical and electromagnetic effects, electrostatic discharge, radiation associated with diagnostic or therapeutic procedures, pressure, humidity, or temperature.

If an IVD reagent is considered hazardous, the instructions for use shall include the appropriate signal words, product identifiers, hazard pictograms, hazard statements and precautionary statements.

If a hazard is associated with storage, use or disposal of the IVD reagent, including reasonably foreseeable misuse, information that enables the user to reduce the risk shall be given.

EXAMPLE Chemical or biological hazard.

Local, national or regional regulations can apply.

The requirements of ISO 14971 pertaining to information for safety apply.

NOTE 1 Information that enables users to reduce a risk is called “information for safety”. See ISO 14971.

If an IVD reagent includes substances of human, microbial or animal origin that present a risk of infection, a warning shall be given.

Information on the safe handling and disposal of hazardous materials shall be given.

If the IVD reagent is intended for single use, an appropriate warning shall be included. See intended use on label.

NOTE 2 In some countries authorities having jurisdiction may set local requirements for the contents of warnings and precautions and/or measures to be taken and limitations of use regarding the device. For example, in the European Union the instructions for use give notice to the user that any serious incident that has occurred in relation to the device shall be reported to the manufacturer and the competent authority of the Member State in which the user and/or the patient is established.

7.10 Primary sample collection, handling and storage

The primary sample to be used and any special conditions of collection pre-treatment and/or storage conditions shall be specified.

Any special instructions for the preparation of the person to be tested prior to primary sample collection shall be given.

7.11 Procedure to obtain a result

A complete, detailed description of the examination procedure to be followed shall be provided.

The procedure shall include all the steps necessary to collect the sample, carry out the examination and obtain a result.