
Transfusion equipment for medical use —

Part 4:

Transfusion sets for single use

Matériel de transfusion à usage médical —

Partie 4: Appareils de transfusion non réutilisables



This document is a preview generated by EVS



COPYRIGHT PROTECTED DOCUMENT

© ISO 2012

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 General requirements	2
3.1 Nomenclature for components of the transfusion set	2
3.2 Maintenance of sterility.....	2
3.3 Designation	3
4 Materials	3
5 Physical requirements	3
5.1 Particulate contamination.....	3
5.2 Leakage	3
5.3 Tensile strength.....	3
5.4 Closure-piercing device.....	3
5.5 Tubing.....	4
5.6 Filter for blood and blood components	4
5.7 Drip chamber and drip tube.....	4
5.8 Flow regulator.....	4
5.9 Flow rate of blood and blood components.....	4
5.10 Injection site.....	5
5.11 Male conical fitting	5
5.12 Protective caps	5
6 Chemical requirements.....	5
6.1 Reducing (oxidizable) matter	5
6.2 Metal ions	5
6.3 Titration acidity or alkalinity.....	5
6.4 Residue on evaporation.....	5
6.5 UV absorption of extract solution.....	5
7 Biological requirements.....	6
7.1 General	6
7.2 Sterility.....	6
7.3 Pyrogenicity	6
7.4 Haemolysis.....	6
7.5 Toxicity	6
8 Labelling.....	6
8.1 Unit container	6
8.2 Shelf or multi-unit container	7
9 Packaging.....	7
10 Disposal.....	7
Annex A (normative) Physical tests.....	8
Annex B (normative) Chemical tests	12
Annex C (normative) Biological tests	14
Bibliography.....	15

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 1135-4 was prepared by Technical Committee ISO/TC 76, *Transfusion, infusion and injection, and blood processing equipment for medical and pharmaceutical use*.

This fifth edition cancels and replaces the fourth edition (ISO 1135-4:2010), which has been revised at Figure 2 (dimensions of the closure-piercing device), at 6.1, at 8.2 (Note), and at B.2 (last sentence).

ISO 1135 consists of the following parts, under the general title *Transfusion equipment for medical use*:

- *Part 3: Blood-taking set*
- *Part 4: Transfusion sets for single use*

Transfusion equipment for medical use —

Part 4: Transfusion sets for single use

1 Scope

This part of ISO 1135 specifies requirements for single-use transfusion sets for medical use in order to ensure their compatibility with containers for blood and blood components as well as with intravenous equipment.

Secondary aims of this part of ISO 1135 are to provide guidance on specifications relating to the quality and performance of materials used in transfusion sets and to present designations for transfusion set components.

In some countries, the national pharmacopoeia or other national regulations are legally binding and take precedence over this part of ISO 1135.

2 Normative references

The following referenced documents are indispensable for the application 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 594-1:1986, *Conical fittings with a 6 % (Luer) taper for syringes, needles and certain other medical equipment — Part 1: General requirements*

ISO 594-2:1998, *Conical fittings with 6 % (Luer) taper for syringes, needles and certain other medical equipment — Part 2: Lock fittings*

ISO 3696:1987, *Water for analytical laboratory use — Specification and test methods*

ISO 3826-1:2003, *Plastics collapsible containers for human blood and blood components — Part 1: Conventional containers*

ISO 7864:1993, *Sterile hypodermic needles for single use*

ISO 14644-1:1999, *Cleanrooms and associated controlled environments — Part 1: Classification of air cleanliness*

ISO 15223-1:—¹⁾, *Medical devices — Symbols to be used with medical device labels, labelling and information to be supplied — Part 1: General requirements*

1) To be published. (Revision of ISO 15223-1:2007)