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Aru 10 Tallinn 10317 Eesti; www.evs.ee; Telefon: 605 5050; E-post: info@evs.ee

EUROPEAN STANDARD
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English Version

Laboratory glassware - Single-volume pipettes (ISO 648:2008)

Verrerie de laboratoire - Pipettes à un volume (ISO
648:2008)

Laborgeräte aus Glas - Vollpipetten (ISO 648:2008)

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Management Centre: rue de Stassart, 36 B-1050 Brussels

Foreword

This document (EN ISO 648:2008) has been prepared by Technical Committee ISO/TC 48 "Laboratory glassware and related apparatus" in collaboration with Technical Committee CEN/TC 332 "Laboratory equipment", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2009, and conflicting national standards shall be withdrawn at the latest by April 2009.

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Endorsement notice

The text of ISO 648:2008 has been approved by CEN as a EN ISO 648:2008 without any modification.

Contents

	Page
Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Basis of adjustment.....	2
4.1 Unit of volume	2
4.2 Delivery volume	2
4.3 Reference temperature	2
5 Types and classes of accuracy	2
5.1 Classes of accuracy	2
5.2 Types of single-volume pipette	2
6 Maximum permissible errors	3
7 Construction	3
7.1 Material	3
7.2 Shape	3
7.3 Bulb	3
7.4 Dimensions	4
7.5 Top of pipette	5
7.6 Delivery jet	5
7.7 Delivery time	5
7.8 Waiting time	6
8 Graduation line(s)	6
9 Setting of the meniscus	6
10 Marking	6
11 Visibility of graduation lines, figures and inscriptions	7
12 Colour coding	7
Bibliography	8

Laboratory glassware — Single-volume pipettes

1 Scope

This International Standard specifies metrological and constructional requirements for volumetric pipettes with one mark (total delivery) and for volumetric pipettes with two marks, both of which are adequate for general laboratory purposes.

The details specified are in conformity with the principles of design and construction of volumetric glassware given in ISO 384.

NOTE For graduated pipettes, see ISO 835. For piston-operated pipettes, see ISO 8655-2.

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 384:1978, *Laboratory glassware — Principles of design and construction of volumetric glassware*

ISO 719, *Glass — Hydrolytic resistance of glass grains at 98 °C — Method of test and classification*

ISO 1769, *Laboratory glassware — Pipettes — Colour coding*

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

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

delivery volume

volume of liquid discharged from the pipette

NOTE Due to retention of liquid on the inner surface of the volumetric instrument, the volume of liquid delivered is not identical with the volume of liquid contained by the volumetric instrument.

3.2

delivery time

time required for the descent of the liquid meniscus from the graduation line to the point at which the meniscus appears to come to rest in the jet for one-mark pipettes and from the upper graduation line to the lower graduation line for two-mark pipettes

3.3

waiting time

time to be observed after apparent completion of the liquid delivery of the volumetric instrument

NOTE A waiting time applies for Class AS single-volume pipettes (see Clause 5 and 7.8).