Labori klaasnõud. Ühe märgiga mõõtekolvid

Laboratory glassware - One-mark volumetric flasks

EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 1042:2000 sisaldab Euroopa standardi EN ISO 1042:1999 ingliskeelset teksti. Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN ISO 1042:2000 consists of the English text of the European standard EN ISO 1042:1999. This document is endorsed on 11.01.2000 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: Standard määrab kindlaks nõuded rahvusvaheliselt kvaliteedinõuetele vastavaks tunnistatud ühe märgiga mõõtekolbide kohta, mis sobivad laboratoorseks üldotstarbeliseks kasutamiseks.	**Scope:**

ICS 17.060, 71.040.20

Võtmesõnad: capacity, dimensions, form specifications, laboratory equipment, laboratory glassware, marking, specifications, volumetric flasks

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 1042

May 1999

ICS 17.060; 71.040.20

English version

Laboratory glassware

One-mark volumetric flasks

(ISO 1042 : 1998)

Verrerie de laboratoire – Fioles jaugées à un trait (ISO 1042 : 1998)

Laborgeräte aus Glas – Meßkolben (ISO 1042 : 1998)

This European Standard was approved by CEN on 1999-04-04.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 1042 : 1998 Laboratory glassware – One-mark volumetric flasks,

which was prepared by ISO/TC 48 'Laboratory glassware and related apparatus' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 332 'Laboratory equipment', the Secretariat of which is held by DIN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by November 1999 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 1042 : 1998 was approved by CEN as a European Standard without any modification.

Introduction

Volumetric flasks together with analytical balances are the fundamental tools for the preparation of volumetric standard solutions – the basis of chemical analysis. The design of narrow-necked class A volumetric flasks has been optimized to achieve the fewest possible acceptable errors.

With the increasing popularity of piston-operated pipettors, there is market pressure for the manufacture of volumetric flasks with wider necks so that pipettor tips may be inserted to remove solution directly. Wide-necked flasks will of necessity be of lower accuracy than the corresponding capacities of narrow-necked flasks and the insertion of any extraneous device may introduce other errors.

It is therefore recommended that narrow-necked class A volumetric flasks are used for the production of standard solutions and where necessary, a suitable quantity should be poured into an intermediate vessel into which the pipettor tip may be introduced.

In accordance with good laboratory practice, only narrow-necked class A volumetric flasks conforming to this International Standard should be used for precise analytical purposes.

1 Scope

This International Standard specifies requirements for an internationally acceptable series of one-mark volumetric flasks, suitable for general laboratory purposes.

The specifications in this International Standard are in conformity with ISO 384 and with OIML Recommendation No. 4.

2 Normative references

The following standards contain provisions which, through references in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 383:1976, *Laboratory glassware — Interchangeable conical ground joints.*

ISO 719:1985, *Glass — Hydrolytic resistance of glass grains at 98 °C — Method of test and classification.*

ISO 4787:1984, *Laboratory glassware — Volumetric glassware — Methods for use and testing of capacity.*

3 Basis of adjustment

3.1 Unit of volume

The unit of volume shall be the millilitre (ml) which is equivalent to the cubic centimetre (cm^3).

NOTE — The term millilitre (ml) is commonly used as a special name for the cubic centimetre (cm^3), in accordance with a decision of the twelfth Conférence Générale des Poids et Mesures. The term millilitre is acceptable, in general, for references in International Standards to capacities of volumetric glassware and it is used, in particular, in the present text.

3.2 Reference temperature

The standard reference temperature, i.e. the temperature at which the volumetric flask is intended to contain its nominal volume (nominal capacity), shall be 20 °C.

When the flask is required for use in a country which has adopted a standard reference temperature of 27 °C, however, this value shall be substituted for 20 °C.