SLOVENSKI STANDARD
SIST EN ISO 1042:2000

01-junij-2000

Nadomešča:
SIST ISO 1042:1995
SIST ISO 1042:1998

Laboratorijska steklovina - Volumetrijske steklenice z eno oznako (ISO 1042:1998)

Laboratory glassware - One-mark volumetric flasks (ISO 1042:1998)

Laborgeräte aus Glas - Meßkolben (ISO 1042:1998)

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

Ta slovenski standard je istoveten z: **EN ISO 1042:1999**

ICS:

17.060	Merjenje prostornine, mase, gostote, viskoznosti	Measurement of volume, mass, density, viscosity
71.040.20	Laboratorijska posoda in aparati	Laboratory ware and related apparatus

SIST EN ISO 1042:2000 **en**

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)

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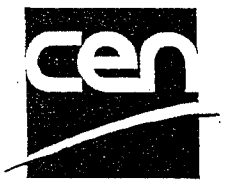
This European Standard was approved by CEN on 4 April 1999.

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.

This European Standard exists 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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

Foreword

The text of the International Standard from Technical Committee ISO/TC 48 "Laboratory glassware and related apparatus" of the International Organization for Standardization (ISO) has been taken over as an European Standard by 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 November 1999, and conflicting national standards shall be withdrawn at the latest by November 1999.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

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

INTERNATIONAL STANDARD

ISO 1042

Fourth edition
1998-07-01

Laboratory glassware — One-mark volumetric flasks

Verrerie de laboratoire — Fioles jaugées à un trait

Reference number
ISO 1042:1998(E)

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.

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.

ISO 1042 was developed by Technical Committee ISO/TC 48, *Laboratory glassware and related apparatus*, Subcommittee SC 1, *Volumetric instruments*.

This fourth edition cancels and replaces the third edition (ISO 1042:1983) by incorporating the following changes:

a) flasks with capacities of 1, 2, 20 and 5 000 ml have been added;

b) flasks with conical body shape have been added;

c) flasks with wider neck have been added;

d) material has been more precisely defined and a test method for capacity introduced;

e) sizes of ground joints have been added in tables 1 and 2.

International Organization for Standardization
Case postale 56 • CH-1211 Genève 20 • Switzerland
Internet central@iso.ch
X.400 c=ch; a=400net; p=iso; o=isocs; s=central

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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.

Laboratory glassware — One-mark volumetric flasks

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.