SLOVENSKI STANDARD
SIST ISO 4798:2009

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Laboratorijska steklovina - Filtrirni liji

Laboratory glassware - Filter funnels

Verrerie de laboratoire - Entonnoirs à filtrer

Ta slovenski standard je istoveten z: **ISO 4798:1997**

ICS:

71.040.20	Laboratorijska posoda in aparati	Laboratory ware and related apparatus

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INTERNATIONAL STANDARD

ISO 4798

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Laboratory glassware — Filter funnels

Verrerie de laboratoire — Entonnoirs à filtrer

Reference number
ISO 4798:1997(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.

This International Standard ISO 4798 has been prepared by Technical Committee ISO/TC 48, *Laboratory glassware and related apparatus,* Subcommittee SC 2, *General laboratory glassware (other than measuring apparatus).*

Annex A of this International Standard is for information only.

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Laboratory glassware — Filter funnels

1 Scope

This International Standard specifies requirements and dimensions for glass filter funnels suitable for general laboratory purposes, fitting together with other general-use glassware such as boiling flasks and volumetric flasks.

NOTE — Annex A lists additional International Standards for other general-purpose laboratory glassware.

2 Normative references

The following standards contain provisions which, through reference 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 719:1985, *Glass — Hydrolytic resistance of glass grains at 98 °C — Method of test and classification.*

ISO 3585:1991, *Borosilicate glass 3.3 — Properties.*

3 Types and sizes

Two types of filter funnels are specified, in sizes as follows (given in millimetres):

3.1 Plain filter funnels of bowl diameter:

35 – 55 – 75 – 100 – 125 – 150 – 200

3.2 Analytical filter funnels of bowl diameter:

55 – 75 – 100

4 Material

4.1 When tested in accordance with the procedure and classification given in ISO 719, the glass shall comply with the requirements of class HGB3 or better.

The glass shall be free from visible defects and shall be free from internal stress which would impair the performance of the filter funnels.

4.2 At the manufacturer's discretion, filter funnels may be manufactured from borosilicate glass 3.3 in accordance with ISO 3585.

5 Construction

5.1 General appearance

The funnel shall consist of a bowl, having the shape of a right circular cone, and a stem which shall be coaxial with the bowl.

5.2 Bowl

5.2.1 The wall of the bowl shall diverge form the axis of the funnel so as to give an included angle of $60° {}^{0}_{-3°}$.

5.2.2 In plain filter funnels, the bowl shall be plain or with a beaded rim.

5.2.3 In analytical funnels, the bowl shall either be plain or ribbed internally or externally. Where the bowl is ribbed externally, there shall be at least three such ribs evenly spaced round the bowl.

5.3 Rim

The rim of the bowl shall be fire-polished, beaded or ground to a plane surface with the outside slightly bevelled. Any rim bead should not project internally so as to interfere with the lie of the filter paper.

5.4 Stem

5.4.1 In plain filter funnels, the stem should consist of a separate piece of tubing joined neatly and securely to the bowl, or be drawn out from the bowl. The stem may be slightly tapered from the upper to the lower end.

5.4.2 In analytical filter funnels, the stem shall consist of a separate piece of tubing joined neatly and securely to the bowl.

5.4.3 The end of the stem shall be ground at 30° minimum to the axis, and the outer edge of the ground part shall be slightly bevelled or fire-polished.

6 Dimensions

The dimensions of the filter funnels shall be as shown in table 1 and table 2.

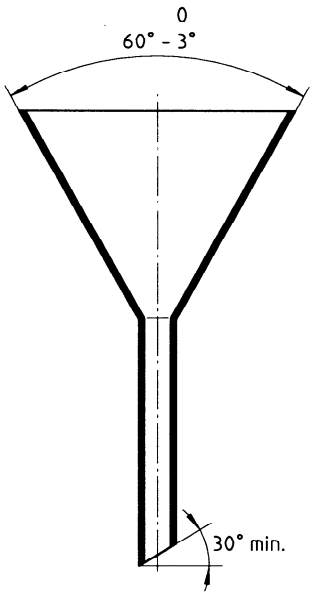

Figure 1 — General design of glass filter funnel (plain or analytical)

Table 1 — Dimensions for plain filter funnels

Dimensions in millimetres

Bowl		Stem		
Internal diameter	Wall thickness min.	Nominal		Wall thickness min.
		External diameter	Length	
35 ± 5	1	6	35	0,8
55 ± 5	1	8	55	1,3
75 ± 5	1	8	75	1,3
100 ± 5	1,2	10	100	1,3
125 ± 5	1,2	16	125	1,3
150 ± 10	1,2	16	150	1,6
200 ± 10	1,5	24	150	1,6

Table 2 — Dimensions for analytical filter funnels

Dimensions in millimetres

Bowl	Stem			
Internal diameter ± 5	Diameter external max.	Diameter internal min.	Wall thickness min	Length ± 5
55	9,4	2,5	1,5	150
75				
100				

7 Marking

The following inscriptions shall be marked on each filter funnel:

— the manufacturer's and/or supplier's name or mark;

— the type of glass, if not otherwise identifiable.

The following are optional:

— the internal diameter of the bowl without tolerances;

— the number of this International Standard.