

# SLOVENSKI STANDARD oSIST prEN ISO 13132:2022

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Laboratorijska steklovina - Petrijevke (ISO/DIS 13132:2022)

Laboratory glassware - Petri dishes (ISO/DIS 13132:2022)

Laborgeräte aus Glas – Petrischalen (ISO/DIS 13132:2022)

Verrerie de laboratoire - Boîtes de Petri (ISO/DIS 13132:2022)

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ICS:

71.040.20 Laboratorijska posoda in

aparati

Laboratory ware and related

apparatus

oSIST prEN ISO 13132:2022 en,fr,de

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# Laboratory glassware — Petri dishes

Verrerie de laboratoire — Boîtes de Petri

ICS: 11.100.01; 71.040.20

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## 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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="www.iso.org/directives">www.iso.org/directives</a>).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 48, Laboratory equipment.

This second edition cancels and replaces the first edition (ISO 13132:2011), which has been technically revised. https://standards.iteh.ai/catalog/standards/sist/1ff4107c-217e-458a-a67f-

The main changes are as follows:

- Additional series 3 for class HGB 3 has been added.
- New dimensions have been added to the series.
- Thermal shock resistance has been added.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

# Laboratory glassware — Petri dishes

# 1 Scope

This document specifies requirements and tests for glass Petri dishes intended for general laboratory purposes and microbiological work.

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 719, Glass — Hydrolytic resistance of glass grains at 98 °C — Method of test and classification

ISO 718, Laboratory glassware — Thermal shock and thermal shock endurance — Test methods

### 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="https://www.electropedia.org/">https://www.electropedia.org/</a>

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# 4 Types

Two types of Petri dishes are specified in this document.

Type 1 — Thick-walled Petri dishes

Type 2 — Thin-walled Petri dishes

#### 5 Nominal sizes and series

### 5.1 Nominal sizes

Petri dishes shall have one of the following nominal sizes:

40, 50, 60, 80, 90, 100, 120, 150, 180 or 200 millimetres

NOTE For Series B, nominal sizes refer to the external diameter of the bottom dish.

#### 5.2 Series

Petri dishes shall comply with the following dimensional requirements:

- For Series A the dimensions shall be in accordance with <u>Table 1</u> (only for Class HGB 1 or HGB 2).
- For Series B the dimensions shall be in accordance with <u>Table 2</u> (only for Class HGB 1 or HGB 2).
- For Series C the dimensions shall be in accordance with <u>Table 3</u> (only for Class HGB 3).

## 6 Designation

Petri dishes in accordance with this document shall be designated by their nominal size followed by the type and the series.

EXAMPLE 1 Designation of a thick-walled Petri dish with nominal size of 120 mm, Type 1, Series A:

Petri dish ISO  $13132 - 120 \times 20 - 1A$ 

If bottom dishes (2) (see Figure 1) and top dishes (1) are ordered separately, the following designations shall be used.

EXAMPLE 2 Designation of a thick-walled bottom dish (2) of nominal size 120 mm, Type 1, Series A:

Petri bottom dish ISO  $13132 - 120 \times 20 - 1A - 2$ 

EXAMPLE 3 Designation of a thick-walled top dish (1) of nominal size 120 mm, Type 1, Series A:

Petri top dish ISO  $13132 - 120 \times 20 - 1A - 1$ 

#### 7 Material

Petri dishes shall be manufactured from transparent glass of hydrolytic resistance Class HGB 1, Class HGB 2 (Dimensions see Series A and B) or Class HGB 3 (Dimensions see Series C) in accordance with ISO 719. The glass shall be reasonably free from residual strain and from defects which might impair safety, durability or appearance such as mould marks and waviness.

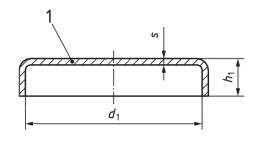
The glass shall not have any pronounced tint.

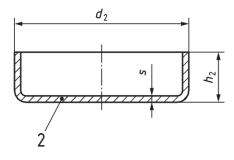
HGB stands for hydrolytic resistance to ISO 719.

#### 8 Dimensions

# 8.1 Series A Petri dishes (class HGB 1 or HGB 2)

Series A Petri dishes shall comply with the dimensions specified in <u>Table 1</u> and should have hydrolytic resistance of class HGB 1 or HGB 2.





# Key

- 1 top dish
- 2 bottom dish
- inner diameter for dish cover  $d_1$
- $h_1$ hight dish cover
- outer diameter for dish bottom and ards.iteh.ai)  $d_2$
- hight dish bottom
- wall thickness

https://standards.itch Figure 1 — Thick-walled Petri dish 7e-458a-a67f-cb67b2003e88/osist-pren-iso-13122022

Table 1 — Dimensions for Series A Petri dishes

Dimensions in millimetres

	Type 1 — Thick-walled (see Figure 1)					Type 2 — Thin-walled (see Figure 1)				
Nominal	$d_1$	$d_2$	$h_1$	$h_2$	S	$d_1$	$d_2$	$h_1$	h <sub>2</sub>	S
size		0 -1	±1	±1	*					±0,3
50 × 12	_	_	_	_	_	47 ± 1	45 ± 1	9 ± 1,5	14 ± 1,5	1,3
60 × 15	_	_	_	_		57 ± 1	54 ± 1	12 ± 1,5	15 ± 1,5	1,8
60 × 20	55 <sup>+1,5</sup>	54	15	20	2,5	56 ± 1	53 ± 1	15 ± 1,5	20 ± 2	1,8
80 × 15	_	1	-	_		77 ± 1	74 ± 1	11 ± 1,5	15 ± 1,5	1,3
80 × 20	71 <sup>+1,5</sup>	70	15	20	2,5	76 ± 1	73 ± 1	15 ± 1,5	20 ± 2	1,8
90 × 15	_	_	_	_	_	86 ± 1	84 ± 1	12 ± 1,5	15 ± 1,5	1,8
95 × 18	_	_	_	_	_	93 ± 1,5	90 ± 1	16 ± 1,5	18 ± 1,5	1,6
100 × 15	91 <sup>+1,5</sup>	90	13	15	3	96 ± 1	93 ± 1	11,5 ± 1,5	15 ± 2	1,8
100 × 20	91 0	90	13	20	3	96 ± 1	93 ± 1	11,5 ± 1,5	20 ± 2	1,8
120 × 20	111 +2	110	15	20	3,5	116 ± 1	113 ± 1	15 ± 1,5	20 ± 2	1,8
150 × 25	_	_	_	_	_	145 ± 1,5	140 ± 1,5	20 ± 2	26 ± 2	2
150 × 30	140 +2	139	15	30	4	146 ± 1,5	141,5 ± 1,5	18 ± 1,5	27 ± 2	1,8
180 × 30	_				_	185 ± 1,5	179 ± 1,5	27 ± 2	30 ± 2	2
200 × 30	_	_	_	<del>(s</del> t	anc	195 ± 2	190 ± 2	25 ± 2	30 ± 2	2

# 8.2 Series B Petri dishes (class HGB 1 or HGB 2)

Series B Petri dishes shall comply with the dimensions specified in <u>Table 2</u> and should have hydrolytic resistance of class HGB 1 or HGB 2. For any pair of Series B Petri dishes, the difference between the internal diameter of the top dish and external diameter of the bottom dish shall be between 2 mm to 4 mm.

Table 2 — Dimensions for Series B Petri dishes

Dimensions in millimetres

		Type 2 —	- <b>Thin-walled</b> (see	Figure 1)	
   Nominal size	$d_1$	$d_2$	$h_1$	$h_2$	S
	+1 0	0 -1	0 -1	+1 0	min.
50 × 17	53	50	15	17	1,0
80 × 17	83	80	15	17	1,0
100 × 17	103	100	15	17	1,5
150 × 20	153	150	17	20	1,5
200 × 20	203	200	20	20	1,5

# 8.3 Series C Petri dishes (class HGB 3)

Series C Petri dishes shall comply with the dimensions specified in <u>Table 3</u> and should have hydrolytic resistance of class HGB 3.