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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 22362-2023

Laboratory glass apparatus - Flasks

实验室玻璃仪器 烧瓶

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Foreword

This document is in accordance with the provisions of GB/T 1:1-2020 "Guidelines for Standardization Work Part 1: Structure and Drafting Rules for Standardization Documents" drafting: This document replaces GB/T 22362-2008 "Laboratory Glass Apparatus Flasks" and GB/T 15725:4-1995 "Laboratory Glass Apparatus Two-necked and three-necked spherical round bottom flasks": This document is based on GB/T 22362-2008, integrating the contents of GB/T 15725:4-1995 Allow: Compared with GB/T 22362-2008, except for structural adjustment and editorial changes, the main technical changes are as follows:

- Changed the normative references (see Chapter 2, Chapter 2 of GB/T 22362-2008);
- Changed the structure type and size of the flask (see Table 1, Table 1 of GB/T 22362-2008);
- Changed the structure type and size of the narrow-necked Erlenmeyer flask (see 5:1, 4:1 of GB/T 22362-2008);
- Increased the structure type and size of the wide-mouth Erlenmeyer flask (see 5:1);
- Changed the structure type and size of the Kjeldahl flask (see 5:3, 4:3 of GB/T 22362-2008);
- Increased the structure type and size of the double-necked round bottom flask (see 5:7);
- Increased the structure type and size of the three-neck round bottom flask (see 5:8);
- Increased the structure type and size of the eggplant flask (see 5:9);
- Changed the material reference standard (see 6:1, 5:1 of GB/T 22362-2008);

- Changed appearance requirements (see 6:3, 5:3 of GB/T 22362-2008);
- Changed the test method (see Chapter 7, Chapter 6 of GB/T 22362-2008);
- Changed the inspection rules (see Chapter 8, Chapter 7 of GB/T 22362-2008);
- Changed the capacity graduation table of the Erlenmeyer flask (see Appendix C, Appendix A of GB/T 22362-2008): This document is modified to adopt ISO 1773:1997 "Laboratory Glass Apparatus Narrow-necked Flasks": Compared with ISO 1773:1997, this document has more structural adjustments: For the comparison list of structural number changes between the two documents, see Appendix A: Compared with ISO 1773:1997, this document has more technical differences, and vertical single Lines (l) are marked: See Appendix B for a list of these technical differences and their causes: The following editorial changes have been made to this document:

1 Scope

GB/T 22362-2023 specifies laboratory glass flasks. They look like the most ordinary objects in a laboratory and are the ones most likely to injure someone: a flask is heated, evacuated, pressurised by an unexpected reaction, and clamped by the neck, and a wall thickness variation or a poor anneal turns it into fragments. The standard covers the whole family - conical flasks with narrow and wide necks, distillation flasks, single, two and three-necked round bottom flasks and pear-shaped flasks - setting the product categories, the structural types, dimensions and design, the technical requirements on materials, physical and chemical properties and appearance, the test methods, and the inspection rules and marking and packaging provisions. It replaces GB/T 22362-2008 and GB/T 15725.4-1995 and took effect on 1 December 2023.

This document specifies the product classification, structure type, size and structure design, technical requirements, test methods, inspection rules, and labels of flasks: marking, packaging, transportation and storage: This document applies to laboratory glass flasks:

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text: Among them, dated references Only the version corresponding to that date applies to this document: For undated references, the latest edition (including any amendments) applies to this document:

GB/T 191 Packaging, storage and transportation icons (GB/T 191-2008, ISO 780:1997, MOD) GB/T 2828:

1 Counting sampling inspection procedure Part 1: Batch-by-batch inspection sampling plan retrieved by acceptance quality limit (AQL) (GB/T 2828:1-2012, ISO 2859-1:1999, IDT)

GB/T 4548 Test method and classification of inner surface water erosion resistance of glass containers (GB/T 4548-1995, eqv ISO 4802-1: 1988) GB/T 4548:

2 Determination and classification of the water erosion resistance of the inner surface of glass containers by flame spectroscopy (GB/T 4548-2- 2003, ISO 4802-2:1988, IDT)

GB/T 6543 Single and double corrugated cartons for transport packaging

GB/T 6579 Test method for thermal shock and thermal shock strength of laboratory glass instruments (GB/T 6579-2007, ISO 718: 1990, IDT)

GB/T 6580 Test method and classification of glass resistance to boiling mixed alkali aqueous solution (GB/T 6580-2021, ISO 695: 1991, MOD)

GB/T 6581 Flame emission or atomic absorption spectrometry method for determination of resistance to hydrochloric acid attack of glass at 100°C (GB/T 6581- 2007, ISO 1776:1985, MOD)

GB/T 6582 Water resistance test method and classification of glass glass particles at 98 °C (GB/T 6582-2021, ISO 719:2020, MOD)

GB/T 15726 Test method for internal stress of glass instruments

GB/T 15728 Gravimetric test method and classification of glass corrosion resistance to boiling hydrochloric acid

GB/T 16920 Determination of average linear thermal expansion coefficient of glass

GB/T 21297 Interchangeable conical frosted joints for laboratory glass instruments (GB/T 21297-2007, ISO 383:1976, IDT)

3 Terms and Definitions

This document does not have terms and definitions that need to be defined: