INTERNATIONAL STANDARD

ISO 9727

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Cylindrical stoppers of natural cork — Physical tests — Reference methods

Bouchons cylindriques en liège naturel — Essais physiques — Méthodes de référence



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.

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Cylindrical stoppers of natural cork — Physical tests — Reference methods

1 Scope

This International Standard specifies the reference methods for determining the following characteristics of cylindrical stoppers of natural corkwood: dimensions; deviations from parallelism of bases and from perpendicularity of sides and bases; apparent density; moisture content; behaviour under compression; extraction and penetration strengths; absorption; and capillarity¹⁾.

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 2859-1:1989, Sampling procedures for inspection by attributes — Part 1: Sampling plans indexed by acceptable quality level (AQL) for lot-by-lot inspection.

ISO 3951:1989, Sampling procedures and charts for inspection by variables for percent nonconforming.

ISO 4707:1981, Cork — Stoppers — Sampling for inspection of dimensional characteristics.

3 Sampling

Unless otherwise agreed between purchaser and vendor the size of the sample and the acceptable quality level shall be in accordance with ISO 2859-1, ISO 3951, and ISO 4707.

4 Reagents

- 4.1 Ethanolic solution, 10 % (V/V).
- 4.2 Coloured²⁾ ethanolic solution, 10 % (V/V).

5 Apparatus

- 5.1 Apparatus, (see figure 1), to measure dimensions and angles of inclination of bases, and check base parallelism of stoppers, consisting of
- **5.1.1** Rectangular base, in transparent acrylic plastic, dimensions 220 mm \times 220 mm, fitted with four levelling-screws.
- **5.1.2 Plate**, in stainless steel, dimensions 170 mm \times 150 mm \times 9 mm, fitted with two upright cylindrical stainless steel rods, 200 mm high and 10 mm diameter. These rods are perpendicular to the plate and 120 mm apart (measured from centre to centre). This plate fits completely into the base (5.1.1).
- **5.1.3 Two dial-gauges**, with a measuring range of 50 mm and a resolution of 0,01 mm, with forked plunger ends and rotary dials for zero setting.
- **5.1.4 Two supports**, with a circular opening in one end through which passes one of the cylindrical rods referred to in 5.1.2. The supports are fixed to the rods by screws. The other end of the supports is fixed to the inside of roller bearings set on the

¹⁾ Sealing behaviour will be covered later.

²⁾ Orange II.