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Laboratory glassware - Vacuum-jacketed vessels for heat insulation (ISO 16496:2016)

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

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Verrerie de laboratoire - Récipients à double enveloppe à vide pour isolation thermique (ISO 16496:2016) Laborgeräte aus Glas - Geräte mit Vakuummantelisolierung (ISO 16496:2016)

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EN ISO 16496:2016 (E)

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European foreword

This document (EN ISO 16496:2016) has been prepared by Technical Committee ISO/TC 48 "Laboratory equipment" in collaboration with 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of an identical text or by endorsement, at the latest by August 2016, and conflicting national standards shall be withdrawn at the latest by August 2016.

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Endorsement notice

The text of ISO 16496:2016 has been approved by CEN as EN ISO 16496:2016 without any modification.

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Laboratory glassware — Vacuumjacketed vessels for heat insulation

 $\textit{Verrerie de laboratoire} \ -- \ \textit{R\'ecipients \`a double enveloppe \`a vide pour isolation thermique}$



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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.

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 48, *Laboratory equipment*.

Laboratory glassware — Vacuum-jacketed vessels for heat insulation

1 Scope

This International Standard recommends dimensions and specifies requirements and test methods for laboratory glassware manufactured from borosilicate glass 3.3 and provided with a vacuum jacket for thermal insulation. It covers Dewar vessels, vacuum-jacketed reaction vessels and vacuum-jacketed columns intended for laboratory use and laboratory related applications. Typical dimensions are given in Tables 1 to 5.

This International Standard does not apply to large scale production equipment and equipment operated with pressures of more than 0,1 bar above atmospheric pressure.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 383, Laboratory glassware — Interchangeable conical ground joints

ISO 641, Laboratory glassware — Interchangeable spherical ground joints

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

ISO 3585, Borosilicate glass 3.3 — Properties

ISO 4803, Laboratory glassware — Borosilicate glass tubing

ISO 4790, *Glass-to-glass sealings* — *Determination of stresses*

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