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Piston-operated volumetric apparatus —

Part 7: Alternative measurement procedures for the determination of volume

Appareils volumétriques à piston —

*Partie 7: Modes opératoires de mesure alternatifs pour la
détermination de volumes*



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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 www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 48, *Laboratory equipment*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 332, *Laboratory equipment*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 8655-7:2005), which has been technically revised. It also incorporates the Technical Corrigendum ISO 8655-7:2005/Cor.1:2008.

The main changes are as follows:

- a gravimetric test method was added (see [8.2](#));
- a photometric/gravimetric hybrid test method was added (see [8.5](#));
- a batch testing method was added (see [8.7](#));
- measurement procedures for all methods are given in normative [Annexes A](#) to [E](#);
- standard dispense procedures for POVA described in ISO 8655-2, ISO 8655-3, ISO 8655-4, ISO 8655-5, and ISO 8655-9 were added (see [Clause 9](#));
- requirements for operator qualification have been added (see [4.3](#));
- requirements for testing of multi-channel POVA is described in more detail, with specific procedures given for these apparatus (see [8.5](#), and [Annex D](#));
- [Annexes A](#), [B](#), and [C](#) of the first edition have been deleted and replaced.

A list of all parts in the ISO 8655 series can be found on the ISO website.

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 www.iso.org/members.html.

Introduction

The ISO 8655 series addresses the needs of:

- manufacturers, as a basis for quality control including, where appropriate, the issuance of manufacturer's declarations;
- calibration laboratories, test houses, users of the equipment and other bodies as a basis for independent calibration, testing, verification, and routine tests.

The tests specified in the ISO 8655 series are intended to be carried out by trained personnel.