ICS 17.060, 71.040.20 SLOVENSKÁ TECHNICKÁ NORMA September 2022

STN	**Piestové odmerné prístroje Časť 9: Manuálne ovládané presné laboratórne striekačky (ISO 8655-9: 2022)**	**STN EN ISO 8655-9** 70 4110

Piston-operated volumetric apparatus - Part 9: Manually operated precision laboratory syringes (ISO 8655-9:2022)

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/22

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 8655-9

May 2022

ICS 17.060; 71.040.20

English Version

Piston-operated volumetric apparatus - Part 9: Manually operated precision laboratory syringes (ISO 8655-9:2022)

Appareils volumétriques à piston - Partie 9: Seringues de laboratoire haute précision pour utilisation manuelle (ISO 8655-9:2022)

Volumenmessgeräte mit Hubkolben - Teil 9: Manuell betätigte Präzisionslaborspritzen (ISO 8655-9:2022)

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European foreword

This document (EN ISO 8655-9:2022) 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of an identical text or by endorsement, at the latest by November 2022, and conflicting national standards shall be withdrawn at the latest by November 2022.

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INTERNATIONAL STANDARD

ISO 8655-9

First edition
2022-04

Piston-operated volumetric apparatus —

Part 9: Manually operated precision laboratory syringes

Appareils volumétriques à piston —

Partie 9: Seringues de laboratoire haute précision pour utilisation manuelle

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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).

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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 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).

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.

INTERNATIONAL STANDARD **ISO 8655-9:2022(E)**

Piston-operated volumetric apparatus —

Part 9:
Manually operated precision laboratory syringes

1 Scope

This document specifies

— metrological requirements,

— maximum permissible errors,

— requirements for marking and

— information to be provided for users,

for manually operated precision laboratory syringes made of glass or glass and metal designed to deliver their selected volume (Ex).

Manually operated precision laboratory syringes are instruments used for delivering liquids and gases. The barrel is typically made of glass and the plunger and the needle are typically made of metal.

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 3696:1987, *Water for analytical laboratory use — Specification and test methods*

ISO 8655-1:2022,*Piston-operated volumetric apparatus — Part 1: Terminology, general requirements and user recommendations*

ISO 8655-6, *Piston-operated volumetric apparatus — Part 6: Gravimetric reference measurement procedure for the determination of volume*

ISO 8655-7, *Piston-operated volumetric apparatus — Part 7: Alternative measurement procedures for the determination of volume*

ISO 8655-8, *Piston-operated volumetric apparatus — Part 8: Photometric reference measurement procedure for the determination of volume*