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Electronic cigarettes and e-liquids - Determination of nicotine delivery consistency over defined puff sequences of a number of e-cigarettes of identical type

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 17634:2023 sisaldab Euroopa standardi EN 17634:2023 ingliskeelset teksti.	This Estonian standard EVS-EN 17634:2023 consists of the English text of the European standard EN 17634:2023.
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Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 17.05.2023.	Date of Availability of the European standard is 17.05.2023.
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English Version

Electronic cigarettes and e-liquids - Determination of nicotine delivery consistency over defined puff sequences of a number of e-cigarettes of identical type

Cigarettes électroniques et e-liquides - Détermination de la constance de délivrance de la nicotine lors de séquences de bouffées définies avec plusieurs e-cigarettes identiques

Elektronische Zigaretten und E-Liquids - Bestimmung der gleichmäßigen Abgabe von Nikotin über definierte Zugsequenzen einer Anzahl von E-Zigaretten identischen Typs

This European Standard was approved by CEN on 10 March 2023.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN 17634:2023) has been prepared by Technical Committee CEN/TC 437 “Electronic cigarettes and e-liquids”, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by November 2023, and conflicting national standards shall be withdrawn at the latest by November 2023.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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1 Scope

This document specifies a method for the determination of nicotine delivery consistency between e-cigarettes (devices, consumables and combinations).

This document:

- defines the equipment to be used;
- specifies the preparation of the samples for testing;
- specifies the aerosol collection process;
- specifies the analytical method.

Suitable sampling procedures are described for obtaining results from within a single production batch, as well as for sampling across batches.

The method in this document does not seek to demonstrate whether there is consistency between puffs generated at the start or nearer the end of a tank fill or battery charge. The latter is the aim of a separate method under development, EN 17746 *Electronic cigarettes and e-liquids — Determination of nicotine delivery consistency over defined puff sequences within a single e-cigarette* [1]. Two separate methods have been developed to determine consistency of nicotine delivery, pending regulatory clarity on the Tobacco Products Directive's requirement to “deliver nicotine doses at consistent levels” [2].

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.

EN 17375, *Electronic cigarettes and e-liquids — Reference e-liquids*

EN ISO 24197, *Vapour products — Determination of e-liquid vaporized mass and aerosol collected mass (ISO 24197)*

EN ISO 24199, *Vapour products — Determination of nicotine in vapour product emissions — Gas chromatographic method (ISO 24199)*

ISO 20768, *Vapour products — Routine analytical vaping machine — Definitions and standard conditions*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp/ui>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1 aerosol

system of colloidal particles suspended in gas by the use of an e-cigarette

Note 1 to entry: Vapour is a generally accepted, but scientifically incorrect, term for aerosol.