## INTERNATIONAL STANDARD

ISO 8454

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# Cigarettes — Determination of carbon monoxide in the vapour phase of cigarette smoke — NDIR method

Cigarettes — Dosage du monoxyde de carbone dans la phase gazeuse de la fumée de cigarette — Méthode IRND

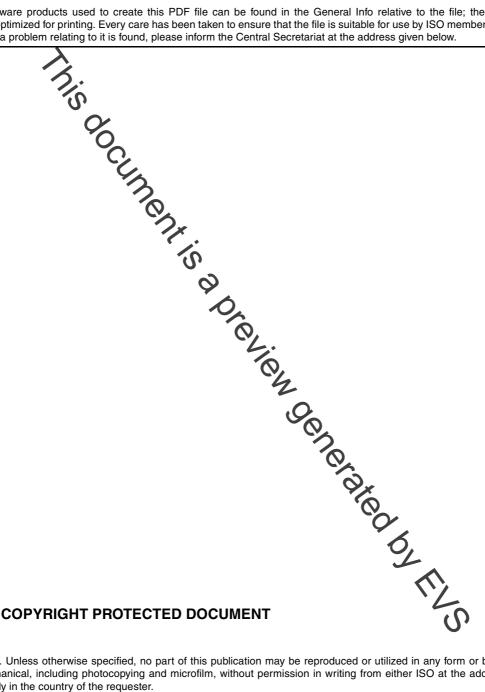


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#### **Foreword**

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The main task of technical committees is to prepare International Standards. 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.

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.

ISO 8454 was prepared by Technical Committee ISO/TC 126, Tobacco and tobacco products.

Dreview Denotated by Files This third edition cancels and replaces the second edition (ISO 8454:1995), which has been technically revised.

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Inis document is a preview denetated by EUS

### Cigarettes — Determination of carbon monoxide in the vapour phase of cigarette smoke — NDIR method

#### 1 Scope

This International Standard specifies a method for the determination of carbon monoxide (CO) in the vapour phase of cigarette smoke.

#### 2 Normative references

The following referenced documents are indispensable for the application 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 3308, Routine analytical cigarette-moking machine — Definitions and standard conditions

ISO 3402, Tobacco and tobacco products Atmosphere for conditioning and testing

ISO 4387, Cigarettes — Determination of total and nicotine-free dry particulate matter using a routine analytical smoking machine

#### 3 Terms and definitions

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

#### 3.1

#### vapour phase

portion of smoke, which passes the particulate phase trap during smoking in accordance with ISO 4387 using a machine conforming to ISO 3308

#### 3.2

#### clearing puff

any puff taken after a cigarette has been extinguished or removed from the cigarette holder

#### 4 Principle

Smoking of cigarettes in accordance with the procedures given in ISO 4387. Collection of the vapour phase of the cigarette smoke and measurement of the carbon monoxide using a non-dispersive infrared (NDIR) analyser calibrated for carbon monoxide. Calculation of the amount of carbon monoxide per cigarette.

#### 5 Apparatus

Usual laboratory apparatus and, in particular, the following items.

- **5.1** Conditioning enclosure, maintained accurately in accordance with the conditions specified in ISO 3402, for conditioning the cigarette sample prior to smoking (see also 7.1).
- **5.2 Routine analytical cigarette-smoking machine and accessories**, complying with the requirements of ISO 3308.