



SLOVENSKI STANDARD
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Cigarettes - Sampling

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ICS:

65.160 V[àæ È[àæ } àá à^ \ àá
[] ! ^ { æ Tobacco, tobacco products
and related equipment

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INTERNATIONAL STANDARD

ISO 8243

Third edition
2003-12-15

Cigarettes — Sampling

Cigarettes — Échantillonnage

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

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 8243 was prepared by Technical Committee ISO/TC 126, *Tobacco and tobacco products*.

This third edition cancels and replaces the second edition (ISO 8243:1991), which has been editorially revised to include confidence intervals for carbon monoxide.

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Introduction

Existing national standards, rules, regulations and laws were taken into account when preparing this International Standard and two different procedures are described:

- sampling at the point of sale;
- sampling at the producer's premises or importer's and distributor's warehouses.

Sophisticated sampling plans are often too expensive to be used. The two procedures in this International Standard are both simple and reliable.

Sampling is carried out either as a single procedure or as part of a series of samplings.

Sampling is carried out "at one point in time" (e.g. cigarettes available for distribution from a factory/warehouse or available at a retail outlet on the market on a particular day). When a sample is required which represents cigarettes available over an appreciable period of time (e.g. cigarettes representing several months' production) a number of sub-period samples will be taken at different times and the results combined.

The sampling plan depends upon the purpose of sampling (e.g. determination of physical properties or of smoke constituents). Further background considerations on the choice of sampling procedures are given in Annex C. It concludes that determinations of smoke yield should be made on the population manufactured for sale, sampled at manufacturers' factories or importers' warehouses, and that because of variations in cigarette manufacture the "sampling over a period of time" mode should be used wherever possible.

Detailed sampling plans are given in Annexes A and B.
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NOTE Although outside the scope of this International Standard at present, it is recognized that there may be circumstances where it is relevant to the objectives for which test results are required to sample over a period of time at point of sale.

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Cigarettes — Sampling

1 Scope

This International Standard specifies two methods of sampling a population of cigarettes manufactured for sale for the preparation of samples. Different procedures are specified (see Table 1) according to whether sampling is undertaken at the point of sale, at the producer's premises, or the importer's and distributor's warehouses.

- a) Sampling "at one point in time" provides an instantaneous estimate of one or more characteristics of cigarettes. Sampling is carried out within as short a period as possible, not exceeding 14 d.
- b) Sampling "over a period of time" provides a continuous estimate of one or more characteristics of cigarettes. It can be considered for practical purposes as a series of samples each taken "at one point in time".

Table 1 — Sampling possibilities

Sampling procedures	Sampling mode	
	At one time (instantaneous)	Over a period (continuous)
A At point of sale	Subclause 4.2	
B At producer's premises or importer's and distributor's warehouses	Subclause 4.3	Subclause 6.2

This International Standard provides information on the statistical treatment of data and provides estimates, based on practical experience of the order of ranking in condensate, nicotine and carbon monoxide which is found when a product is sampled and smoked in accordance with the specified procedures.

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 5725-1:1994, *Accuracy (trueness and precision) of measurement methods and results — Part 1: General principles and definitions*

ISO 5725-2:1994, *Accuracy (trueness and precision) of measurement methods and results — Part 2: Basic method for the determination of repeatability and reproducibility of a standard measurement method*

3 Terms and definitions

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

3.1

sale unit

quantity of cigarettes ready to be offered for sale to the public

NOTE The commonly sold packet of 20 cigarettes is used as the basis of this International Standard, but cigarettes are also sold loose and in other size packets.

3.2

population

aggregate of sale units of the cigarette to be sampled, intended for sale to consumers in a given geographical area in a given time period

NOTE The definition includes different sub-populations, two of which are given below.

3.2.1

population available to consumers

aggregate of sale units in retail outlets in a given geographical area, at any time in a given time period

3.2.2

population manufactured for sale

aggregate of sale units at a manufacturer's premises available for commercial distribution in a given geographical area, at any time in a given time period

3.3

increment

sample of cigarettes taken at one time, at one sampling point, to be combined to produce the gross sample

3.4

gross sample

aggregate of the increments

3.5

sub-period sample

that part of the whole sample taken in a brief period when sampling over a long period of time

3.6

laboratory sample

sample intended for laboratory inspection or testing and which is representative of the gross sample or the sub-period sample

3.7

test sample

cigarettes for test taken at random from the laboratory sample and which are representative of each of the increments making up the laboratory sample

3.8

test portion

group of cigarettes prepared for a single determination and which is a random sample from the test sample or conditioned sample as appropriate

3.9

place of purchase

town, village or district within the area to be sampled, or that part of the area where the cigarettes are available

NOTE Examples of boundaries are those of cantons, local government districts, electoral areas, postal code areas or any boundaries in accordance with the geographical context, or others.

3.10

sampling point

specific location (e.g. shop, specialist tobacco shop, vending machine, place in warehouse, place in factory) from which an increment is to be taken

3.11

factory

place of manufacture or its associated distribution depots or the warehouse of an importer

3.12

carton

commercial package available within a factory

EXAMPLE Packets of 20 cigarettes are usually put into cartons of 200 cigarettes.

4 Mode for sampling at one time

4.1 General

When a sale unit does not consist of a packet of 20 cigarettes, adjust the number of sale units sampled to produce the required number of cigarettes.

Two sampling procedures are described: in 4.2, a procedure for sampling at the point of sale, and in 4.3, a procedure for sampling at the premises of the manufacturer or importer.

4.2 Procedure for sampling at the point of sale

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4.2.1 Selection of the places of purchase

The required number of increments and the number of places of purchase to be used will depend on the purpose of the test and are given in Annex A (A.2).

4.2.2 Selection of the sampling points

The increments obtained in each place of purchase shall originate from sampling points which are distributed over separate locations throughout the place of purchase.

The choice of sampling points shall, whenever possible, reflect the pattern of retail distribution of cigarettes in that sampling place to be sampled.

NOTE This is usually done by defining for each sampling scheme several kinds of sampling points (e.g. automatic vending machines, supermarkets, specialist tobacco shops).

Each kind of sampling point is sampled at random throughout the place of purchase and, in total, the sample from each kind of sampling point shall make up a defined proportion of the whole sample (this is called a quota from each kind of sampling point).

Sampling shall only be carried out at another kind of sampling point after two unsuccessful attempts have been made at sampling points of the specified kind.