

This is a preview of "ISO 8243:2013". [Click here to purchase the full version from the ANSI store.](#)

Fifth edition
2013-07-01

Cigarettes — Sampling

Cigarettes — Échantillonnage



Reference number
ISO 8243:2013(E)

© ISO 2013



COPYRIGHT PROTECTED DOCUMENT

© ISO 2013

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

This is a preview of "ISO 8243:2013". [Click here to purchase the full version from the ANSI store.](#)

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Sampling mode: At one time	3
4.1 Procedure for sampling at the point of sale.....	3
4.2 Procedure for sampling at the factory.....	5
5 Sampling mode: Over a period of time	6
5.1 General.....	6
5.2 Procedure for sampling over a period of time at the factory.....	6
6 Statistical evaluation and reporting	6
6.1 Statistical evaluation.....	6
6.2 Outliers.....	6
6.3 Confidence interval.....	7
6.4 Applications to the verification of cigarettes yields.....	7
7 Sampling report	8
Annex A (informative) Flow chart illustration of the sampling in Clauses 4 and 5	9
Annex B (informative) Sources of variability concerning the choice of sampling procedures	10
Bibliography	11

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. 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. 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.

The committee responsible for this document is ISO/TC 126, *Tobacco and tobacco products*.

This fifth edition cancels and replaces the fourth edition (ISO 8243:2006), which has been technically revised.

This is a preview of "ISO 8243:2013". Click here to purchase the full version from the ANSI store.

Introduction

It is difficult to recommend a detailed method of sampling cigarettes, suitable for every purpose. The objective of sampling is clearly to provide a representative sample but the problem arises because the specific purpose for which tests are required affects the recommendation.

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

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

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 scheduled 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 in a series of samplings, and the results combined.

Since this International Standard was originally written in 1981, its role in providing a basis of sampling cigarettes for the verification of on-pack declarations of smoke constituent yields has become increasingly important. For this reason a guide to the statistical evaluation and reporting of results is included to clarify the statistical basis of the confidence intervals for nicotine-free dry particulate matter (NFDPM), nicotine and carbon monoxide (CO) that are listed in [Table 3](#).

Sampling according to [Clauses 4](#) and [5](#) of this International Standard provides a representative cigarette sample that might be used for other testing purposes.

The sources of variability arising in cigarette manufacture and in the determination of smoke constituent components are described in [Annex B](#) and in ISO/TR 22305. It is recommended that determinations of smoke constituent yields 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.