DIN ISO 15592-3:2024-05 (E)

Fine -cut tobacco and smoking articles made from it - Methods of sampling, conditioning and analysis - Part 3: Determination of total particulate matter of smoking articles using a routine analytical smoking machine, preparation for the determination of water and nicotine, and calculation of nicotine-free dry particulate matter (ISO 15592-3:2022)

Contents

Page

National foreword 4

National Annex NA (informative) **Bibliography** 6

Foreword 7

Introduction 9

1 Scope 10

2 Normative references 10

3 Terms, definitions and symbols 11
3.1 Terms and definitions 11
3.2 Symbols 12

4 Principle 12

5 Apparatus 13

6 Sampling 15

7 Wrapper used for making FCSAs 15
7.1 General 15
7.2 Manufacture of standard tubes from the wrapper 15
7.3 Determination of average tube mass 15

8 Making of the laboratory fine-cut smoking articles 15
8.1 General 15
8.2 Specification of the FCSAs to be made 15
8.3 Preparation and selection of the FCSAs for test 16
8.4 Special precautions 16

9 Determination of total particulate matter 17
9.1 Preparation of the fine-cut smoking articles for smoking 17
9.1.1 Number of samples 17
9.1.2 Selection of test portions from a bulk of *Q* FCSAs 17
9.1.3 Duplicate test portions 17
9.2 Marking the insertion depth and butt length 17
9.2.1 Standard insertion depth 17
9.2.2 Standard butt length 17
9.2.3 Marking the insertion depth and butt length 17
9.3 Conditioning and testing conditions 18
9.4 Preliminary tests before smoking 18
9.5 Smoking and collection of particulate matter 18
9.5.1 Smoking plan 18
9.5.2 Preparation of smoke traps and FCSA holders 19
9.5.3 Setting up the smoking machine 19
9.5.4 Procedure for smoking run 20
9.6 Removal of smoke traps and FCSA holders 20
9.7 Calculation of total particulate matter 20
9.8 Treatment of total particulate matter for the determination of water and nicotine 21
9.8.1 Extraction procedure 21
9.8.2 Water determination and calculation of DPM 21
9.8.3 Nicotine determination and calculation of NFDPM 21

10 Test report **22**
10.1 General 22
10.2 Characteristic data about the fine-cut tobacco 22
10.3 Sampling 22
10.4 Description of test 22
10.5 Test results 23
11 Precision and collaborative study **23**
11.1 Collaborative wrapper study 23
11.2 Precision 23
Annex A (normative) **Wrapper specification** **25**
Annex B (normative) **Expanded tobacco** **26**
Bibliography **28**