DIN ISO 15152:2019-10 (E)

Tobacco - Determination of the content of total alkaloids as nicotin e - Continuous-flow analysis method (ISO 15152:2003 + Amd.1:2012 + Amd.2:2018)

Contents

Page

National foreword ... 3

National Annex NA (informative) Bibliography ... 4

Foreword ... 5

[A1] Foreword to Amendment 1 [A1] ... 6

Introduction ... 7

1 Scope ... 8

2 Normative references ... 8

3 Principle ... 8

4 Safety precautions ... 8

5 Reagents ... 11
5.1 Polyoxyethylene lauryl ether (Brij 35 solution) ... 11
5.2 Buffer solution A ... 11
5.3 Buffer solution B ... 11
5.4 Chloramine T solution [$CH_3C_6H_4SO_2N(Na)Cl{\cdot}3H_2O$], (*N*-chloro-4-methyl benzenesulfonamide sodium salt) ... 11
5.5 Cyanide neutralizing solution A ... 11
5.6 Cyanide neutralizing solution B ... 11
[A2] 5.7 [A2] Alternative neutralizing solution C ... 11
[A2] 5.8 [A2] Potassium cyanide solution (KCN) ... 12
[A2] 5.9 [A2] Nicotine hydrogen tartrate [$C_{10}H_{14}N_2(C_4H_6O_6)_2{\cdot}2H_2O$] ... 12
[A2] 5.10 [A2] Standard nicotine solutions ... 12
[A2] 5.10.1 [A2] Stock solution ... 12
[A2] 5.10.2 [A2] Working standards ... 12

6 Apparatus ... 12
6.1 Continuous flow analyser ... 12
6.2 Coil for cyanogen chloride generation ... 12

7 Procedure ... 13
7.1 Preparation of samples for analysis ... 13
7.2 Test portion ... 13
7.3 Preparation of test extract ... 13

8 Calculation ... 13

9 Repeatability and reproducibility ... 14

[A1] 10 [A1] Test report ... 14

Annex A (informative) Information about alternative analytical methods ... 15

Annex B (informative) Example of a continuous-flow analyser ... 16

Annex C (informative) Preparation of a microbore five-turn mixing coil ... 17

Bibliography ... 18