ISO 16017-1:2000-11 (E)

Indoor, ambiant and workplace air - Sampling and analysis of volatile organic compounds by sorbent tube/thermal desorption/capillary gas chromatography - Part 1: Pumped sampling

Contents

Page

Foreword iv

1 Scope 1

2 Normative references 2

3 Terms and definitions 2

4 Principle 3

5 Reagents and materials 3

6 Apparatus 5

7 Sample tube conditioning 6

8 Calibration of pump 7

9 Sampling 7

10 Procedure 8
10.1 Safety precautions 8
10.2 Desorption and analysis 8
10.3 Calibration 9
10.4 Determination of sample concentration 10
10.5 Determination of desorption efficiency 10

11 Calculations 10
11.1 Mass concentration of analyte 10
11.2 Volume concentration of analyte 11

12 Interferences 11

13 Performance characteristics 11

14 Test report 12

15 Quality control 12

Annex A (normative) Determination of breakthrough volumes from gas standards 21

Annex B (normative) Determination of breakthrough volume from the extrapolated retention volume 22

Annex C (informative) Description of sorbent types 23

Annex D (informative) Guidance on sorbent selection 24

Annex E (informative) Guidance on sorbent use 25

Annex F (informative) Summary of data on overall uncertainty, precision, bias and storage 26

Bibliography 28