ISO 16017-2:2003-05 (E)

Indoor, ambient and workplace air - Sampling and analysis of volatile organic compounds by sorbent tube/thermal desorption/capillary gas chromatography - Part 2: Diffusive sampling

Contents

Page

Foreword iv

1 Scope 1

2 Normative references 1

3 Principle 2

4 Reagents and materials 2

5 Apparatus 4

6 Sample tube conditioning 5

7 Sampling 5

8 Procedure 6
8.1 Safety precautions 6
8.2 Desorption and analysis 6
8.3 Calibration 8
8.4 Determination of sample concentration 8
8.5 Determination of desorption efficiency 8
8.6 Calibration of uptake rate 8

9 Calculations 9
9.1 Mass concentration of analyte 9
9.2 Volume concentration of analyte 9
9.3 Uptake rates 10

10 Interferences 10

11 Performance characteristics 11

12 Test report 11

13 Quality control 11

Annex A (informative) Operating principles of diffusive sampling 22

Annex B (informative) Description of sorbent types 28

Annex C (informative) Guidance on sorbent selection 29

Annex D (informative) Guidance on sorbent use 30

Annex E (informative) Summary of data on overall uncertainty, precision, bias and storage 31

Bibliography 33