ISO 16000-6:2004-03 (E)

Indoor air - Part 6: Determination of volatile organic compounds in indoor and test chamber a ir by active sampling on Tenax TA sorbent, thermal desorption and gas chromatography using MS/FID

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Terms and definitions 2

4 Principle 2

5 Reagents and materials 3

6 Apparatus 4

7 Conditioning and storage of sorbent tubes 6
7.1 Conditioning 6
7.2 Storage of conditioned sorbent tubes before sampling 6

8 Calibration of pump 6

9 Sampling 6
9.1 Indoor air sampling 6
9.2 Test chamber air sampling 7
9.3 Sampling volumes 7
9.4 Storage of loaded samples 7
9.5 Field blanks 7

10 Analysis 8
10.1 General 8
10.2 Thermal desorption 8
10.3 Temperature programme 8
10.4 Analysis of the samples 9

11 Identification of single VOCs 9

12 Concentration of analytes in the sampled air 9
12.1 General 9
12.2 Volatile organic compounds (VOCs) 9
12.3 Total volatile organic compounds (TVOCs) 10
12.4 VVOC and SVOC compounds observed outside the TVOC range 11

13 Performance characteristics 11

14 Test report 12

15 Quality control 13

Annex A (informative) Examples of compounds detected in indoor air and from building products in test chambers 14

Annex B (informative) Safe sampling volumes (SSV) for selected organic vapours sampled on Tenax TA 20

Annex C (informative) Storage recovery of solvents on Tenax TA® sorbent tubes 22

Bibliography 24