DIN EN 16637-3:2024-01 (E)

Construction products - Assessment of release of dangerous substances - Part 3: Horizontal up-flow percolation test

Contents

Page

European foreword 4

Introduction 6

1 Scope 7

2 Normative references 7

3 Terms and definitions 8

4 Symbols and abbreviations 11
4.1 Symbols 11
4.2 Abbreviations 11

5 Principle 12
5.1 General principles 12
5.2 Number of eluates 12

6 Reagents 13

7 Equipment 14

8 Sample preparation 16
8.1 General 16
8.2 Preparation of the test sample 16
8.2.1 Principles 16
8.2.2 Rules of application 16
8.3 Test portion 17
8.4 Drying 17
8.5 Subsampling 17
8.6 Sieving of samples into fractions 18
8.7 Size reduction of particles 18

9 Test procedure 18
9.1 Temperature 18
9.2 Determination of dry residue 18
9.3 Pre-treatment of the column 18
9.4 Packing of the column 19
9.4.1 General 19
9.4.2 Equilibration 19
9.4.3 Calculation of the flow rate 19
9.5 Collection of eluates 19
9.6 Further preparation of the eluates for analysis 22
9.7 Blank test 22

10 Evaluation of measurement results 22
10.1 Expression of results in concentrations 22
10.2 Expression of results in terms of mass related release 22

11 Documentation and test report 23

12 Test performance 25

13 Indirect methods 25
13.1 Definition 25
13.2 Provisions 25
13.3 Examples of indirect methods 25

Annex A (informative) Examples of sample preparation procedures 26

Annex B (informative) Illustration of the column and accompanying equipment 29

Annex C (informative) Procedures for packing and saturation of the column 30

Annex D (informative) Assessment of release mechanism(s) 33

Annex E (informative) Summary of cumulative results for L/S = 2 and L/S = 10 53

Bibliography 69