

DIN EN 17516:2024-03 (E)

Waste - Characterization of granular solids with potential for use as construction material - Compliance leaching test - Up-flow percolation test

Contents	Page
European foreword	4
Introduction	5
1 Scope	6
2 Normative references	7
3 Terms and definitions	7
4 Symbols and abbreviations	10
4.1 Symbols	10
4.2 Abbreviations	11
5 Principle	12
5.1 General principles	12
5.2 Number of eluates	12
6 Reagents	13
7 Equipment	13
8 Sample preparation	15
8.1 General	15
8.2 Preparation of the test sample	15
8.2.1 Principles	15
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	17
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	23
10.1 Expression of results in concentrations	23
10.2 Expression of results in terms of mass related release	23
11 Documentation and test report	24

12	Test performance	25
Annex A (informative) A-deviations		26
Annex B (informative) Examples of sample preparation procedures		27
B.1	General	27
B.2	Example 1	27
B.3	Example 2	27
Annex C (informative) Illustration of the column and accompanying equipment		30
Annex D (informative) Procedures for packing and saturation of the column		31
D.1	General	31
D.2	Column filling and packing	31
D.3	Procedure for packing	31
D.4	Water saturation	32
Annex E (informative) Assessment of release mechanism(s)		34
E.1	Overview of release mechanisms	34
E.2	Overview of release mechanisms	35
E.3	Overview of release mechanisms	40
E.4	Examples	41
Annex F (informative) Summary of cumulative results for L/S = 2 and L/S = 10		54
F.1	Performance data EN 16637-3 for L/S = 2 and L/S = 10	54
F.2	Inorganic substances	57
F.3	Organic substances	65
Bibliography		71