

DIN EN 14944-2:2025-09 (E)

Influence of cement based products on water intended for human consumption - Test methods - Part 2: Influence of site-applied cement based materials and associated non-cement based products/materials on organoleptic parameters and migration of organic substances (TOC)

Contents	Page
European foreword	6
1 Scope.....	7
2 Normative references.....	7
3 Terms and definitions.....	8
4 Principle.....	11
5 Reagents.....	12
5.1 Chlorine neutralization reagents.....	12
5.2 Waters to be used for testing.....	12
5.3 Cleaning liquids for apparatus.....	13
6 Apparatus	14
6.1 General.....	14
6.2 Apparatus and materials for test piece preparation (see Annexes A, B and C).....	14
6.3 Apparatus and materials for preconditioning and migration procedure.....	15
6.4 Apparatus for odour and flavour assessment	15
6.5 Apparatus for colour and turbidity assessment.....	15
7 Samples and test pieces.....	15
7.1 Sampling, transport and storage of samples.....	15
7.2 Preparation of test pieces.....	16
7.3 Surface area to volume ratio (S/V) for use in the test procedure	16
8 Pre-treatment of samples (curing and preconditioning).....	16
8.1 General.....	16
8.2 Preconditioning.....	16
9 Test procedure.....	17
9.1 General.....	17
9.2 Preparation of migration water for the assessment of odour, flavour, colour, turbidity and TOC.....	17
9.3 Control samples (blank test)	18
10 Determination of odour as TON and flavour as TFN	18
11 Determination of colour and turbidity	18
12 Determination of TOC and calculation of test results.....	19
12.1 Determination of TOC.....	19
12.2 Calculation of test results.....	19
13 Expression of results	20
14 Test report.....	20
14.1 General.....	20
14.2 General information	20
14.3 Information on the product	20
14.4 Information on the test procedure	21
14.5 Test results.....	22

Annex A (informative) Testing and assessing organoleptic parameters and migration of organic substances (TOC) from the constituents of concrete.....	23
A.1 General	23
A.2 Method.....	23
A.3 Normative references	24
A.4 Terms and definitions.....	24
A.5 Principle.....	24
A.6 Reagents.....	25
A.7 Apparatus	25
A.8 Reference (or control) concrete.....	25
A.9 Sampling of constituents.....	26
A.10 Control mix, test mixes and test pieces.....	26
A.11 Concrete mixing and compacting procedure.....	28
A.12 Curing and preconditioning of test pieces.....	28
A.13 Surface area to volume (S/V) ratio.....	29
A.14 Test procedure	29
A.15 Test arrangement.....	29
A.16 Assessment of unapproved constituents	30
A.17 Test report	31
Annex B (informative) Testing and assessing organoleptic parameters and migration of organic substances (TOC) from the constituents of mortars.....	32
B.1 Introduction	32
B.2 Method.....	32
B.3 Normative references	33
B.4 Terms and definitions.....	33
B.5 Principle.....	33
B.6 Reagents.....	34
B.7 Apparatus	34
B.8 Reference (or control) mortar.....	34
B.9 Sampling of constituents.....	35
B.10 Control mix, test mix and test pieces.....	35
B.11 Mortar mixing and compacting procedure	37
B.12 Curing and preconditioning of test pieces.....	37
B.13 Surface area to volume (S/V) ratio.....	37
B.14 Test procedure	37
B.15 Test arrangement.....	37
B.16 Assessment of unapproved constituents	38

B.17	Test report.....	39
Annex C	(normative) Testing and assessing organoleptic parameters and migration of organic substances (TOC) from associated non-cement based products/materials	40
C.1	Introduction.....	40
C.2	Method	40
C.3	Normative references.....	41
C.4	Terms and definitions	41
C.5	Principle.....	41
C.6	Reagents.....	41
C.7	Apparatus	41
C.8	Reference (or control) concrete/mortar.....	41
C.9	Sampling of constituents and unapproved products.....	41
C.10	Control mix, test mix and test pieces	42
C.11	Concrete/mortar mixing and compacting procedure	42
C.12	Curing and preconditioning of test pieces.....	42
C.13	Surface area to volume (S/V) ratio	43
C.14	Test procedure.....	43
C.15	Test arrangement	43
C.16	Assessment of unapproved products	43
C.17	Test report.....	43
Annex D	(informative) Examples of typical test pieces and test conditions as a function of S/V ratio	45
Annex E	(informative) Test arrangements for site-applied cement based materials and associated non-cement based products/materials	46
Annex F	(informative) Additional procedures for testing site-applied cement based products at elevated temperature.....	48
F.1	General.....	48
F.2	Test procedure at elevated temperature	48
F.3	Control samples (blank test)	48
F.4	Expression of results	48
F.5	Reporting.....	48
Annex G	(informative) Discrimination between porous and non-porous coating on site applied cement based products.....	49
G.1	Principle.....	49
G.2	Apparatus	49
G.3	Materials and reagents	49
G.4	Test procedure.....	49
G.5	Determination of pH	50

G.6	Expression of results	50
G.7	Classification criteria	50
Annex H	(informative) Schematic description of the test procedure	51
H.1	Preconditioning	51
H.2	Production of migration water at 23 °C	52
H.3	Typical schedule	53
Annex I	(informative) Procedural tests using standard additions (positive control)	54
Bibliography	55