# DIN EN 772-5:2018-12 (E)

## Methods of test for masonry units - Part 5: Determination of the active soluble salts content of clay masonry units (includes Corrig endum :2017)

## Contents

Page


European foreword ..... 3

1 Scope ..... 4

2 Normative references ..... 4

3 Principle ..... 4

4 Symbols ..... 4

5 Materials ..... 4
5.1 For all methods ..... 4
5.2 Instrumental method Atomic Absorption Spectroscopy (AAS) and flame photometry ..... 5
5.3 Instrumental method Atomic Absorption Spectroscopy (AAS) and flame photometry or inductively coupled plasma spectrometry (ICP) ..... 5
5.4 EDTA method (alternative) ..... 5

6 Apparatus ..... 5

7 Preparation of sample ..... 6
7.1 Sampling ..... 6
7.2 Crushing ..... 6

8 Extraction procedure ..... 6

9 Determinations of cations by instrumental techniques ..... 6
9.1 General ..... 6
9.2 Atomic absorption spectroscopy method (AAS) and flame photometry ..... 6
9.2.1 Sample preparation ..... 6
9.2.2 Calibration: preparation of the reference series ..... 7
9.2.3 Spectroscopic lines and parameters for AAS and flame photometry analysis ..... 7
9.3 Inductively coupled plasma spectrometry method (ICP) ..... 8
9.3.1 General ..... 8
9.3.2 Spectroscopic lines for ICP analysis ..... 8
9.4 Calculation of the results ..... 8

10 Alternative method of determination of the content of active soluble salts ..... 9
10.1 Preparations of reagents for magnesium determination ..... 9
10.1.1 Magnesium test solution (1,0 mg Mg/ml) ..... 9
10.1.2 Preparation of EDTA test solution (0,5 %) ..... 9
10.2 First titration (calcium plus magnesium) ..... 9
10.3 Second titration (calcium) ..... 9
10.4 Magnesium content ..... 9
10.5 Determination of sodium and potassium ..... 9

11 Expression of results ..... 10

12 Test report ..... 10