DIN EN 12946:2023-08 (E)

Liming materials - Determination of the calcium content and magnesium content - Complexometric method

Contents

Page

European foreword 3

Introduction 4

1 Scope 5

2 Normative references 5

3 Terms and definitions 5

4 Principle 5

5 Reagents 5
5.1 General 5
5.2 Hydrochloric acid solution 5
5.3 Hydrochloric acid solution 6
5.4 Hydrochloric acid solution 6
5.5 Standard calcium solution, containing 2,004 g of calcium per litre 6
5.6 Standard magnesium solution, containing 1,216 g of magnesium per litre 6
5.7 Ethylenediamine tetraacetic acid (EDTA) standard solution, c(EDTA) = 0,05 mol/l 6
5.8 Calcein thymolphthalein indicator 6
5.9 Calcon carbonic acid indicator 7
5.10 Eriochrome black T indicator 7
5.11 Triethanolamine 7
5.12 Buffer solution, pH 10,5 7
5.13 Sodium hydroxide solution 7

6 Apparatus 7

7 Sampling 7

8 Procedure 7
8.1 Preparation 7
8.2 Determination 8
8.3 Control test of the standard solutions 9

9 Expression of results 9

10 Precision 9
10.1 General 9
10.2 Repeatability 10
10.3 Reproducibility 10

11 Test report 10

Bibliography 11