

საქართველოს სტანდარტი

პიგმენტები სამშენებლო მასალების შეღებვისათვის ცემენტისა ან/და კირის
საფუძველზე-სპეციფიკაციები და გამოცდის მეთოდები

საქართველოს სტანდარტების და მეტროლოგიის
ეროვნული სააგენტო
თბილისი

საინფორმაციო მონაცემები

1 დამტკიცებულია და შემოღებულია სამოქმედოდ საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს 2014 წლის 28 ოქტომბრის № 86 და 2014 წლის 1 ივლისის № 55 განკარგულებებით

2 მიღებულია გარეკანის თარგმნის მეთოდით სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი ენ 12878:2014 „პიგმენტები სამშენებლო მასალების შეღებვისათვის ცემენტისა ან/და კირის საფუძველზე-სპეციფიკაციები და გამოცდის მეთოდები”

3 პირველად

4 რეგისტრირებულია საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2014 წლის 28 ოქტომბერი №268-1.3-6284

წინამდებარე სტანდარტის სრული ან ნაწილობრივი აღწარმოება, ტირაჟირება და გავრცელება საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს ნებართვის გარეშე არ დაიშვება

English Version

Pigments for the colouring of building materials based on cement and/or lime - Specifications and methods of test

Pigments de coloration des matériaux de construction à base de ciment et/ou de chaux - Spécifications et méthodes d'essai

Pigmente zum Einfärben von zement- und/oder kalkgebundenen Baustoffen - Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 4 January 2014.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword.....4

1 Scope5

2 Normative references5

3 Terms and definitions6

4 Requirements7

4.1 Effects on concrete properties7

4.1.1 General.....7

4.1.2 Setting time7

4.1.3 Compressive strength7

4.2 Composition7

4.2.1 General.....7

4.2.2 Constitution of pigments8

4.2.3 Water soluble substances8

4.2.4 Soluble chloride8

4.2.5 Total chlorine8

4.3 Loss on ignition8

4.4 Emission of radioactivity9

4.5 Release of dangerous substances.....9

4.6 Relative colour strength.....9

4.7 Residue on sieve.....9

4.8 pH value9

4.9 Alkali stability.....9

4.10 Resistance to weathering9

4.11 Thermal stability9

4.12 Colour comparison against standard pigment.....9

5 Test methods.....10

5.1 Effect on concrete properties.....10

5.1.1 Setting time10

5.1.2 Compressive strength10

5.2 Composition10

5.2.1 General.....10

5.2.2 Composition of the pigments10

5.2.3 Water soluble substances10

5.2.4 Soluble chloride10

5.2.5 Total chlorine10

5.3 Loss on ignition11

5.4 Emission of radioactivity11

5.5 Release of dangerous substances.....11

5.6 Relative colour strength.....11

5.6.1 General remarks.....11

5.6.2 Relative colour strength in barytes or white Portland cement CEM I (dry mix)12

5.6.3 Determination of relative colour strength in barytes (wet mix)13

5.6.4 Determination of relative colour strength in white Portland cement mortar (wet mix)13

5.7 Residue on sieve.....14

5.8 pH value14

5.9 Alkali stability.....15

5.9.1 General remarks.....15

საინფორმაციო ნაწილი. სრული ტექსტის სახსრავად შეიძინეთ სტანდარტი.

5.9.2	Preparation of test pieces.....	15
5.9.3	Test procedure.....	15
5.10	Resistance to weathering	15
5.11	Thermal stability	16
5.12	Colour comparison against the standard pigment	16
5.12.1	General	16
5.12.2	Equipment and test materials	16
5.12.3	Mortar formulation:	17
5.12.4	Test procedure.....	17
5.12.5	Evaluation of test.....	17
6	Assessment and verification of constancy of performance – AVCP	18
6.1	General	18
6.2	Sampling.....	18
6.3	Conformity criteria	18
6.4	Product type determination.....	18
6.5	Factory production control.....	19
6.5.1	Concept	19
6.6	Internal quality control.....	22
6.6.1	Process control	22
6.6.2	Measuring and testing	22
6.6.3	Handling, storage, packaging and delivery	22
6.7	Frequency of inspections	22
A.1	Reference to 5.6.2 “ <i>Relative colour strength in barites white Portland cement CEM I (dry mix)</i> ” and 5.6.3 “ <i>Determination of relative colour strength in barytes (wet mix)</i> ”	23
A.2	Reference to 5.9 “ <i>Alkali stability</i> ”	23
A.3	Reference to 5.10 “ <i>Resistance to weathering</i> ”	23
Annex ZA	(informative) Clauses of this European Standard addressing the provisions of the EU Construction Products Regulation	24
ZA.1	Scope and relevant characteristics	24
ZA.2	Procedure for AVCP of pigments for use in the colouring of building materials based on cement and cement/lime combinations	25
ZA.2.1	Systems of Assessment and verification of constancy of performance (AVCP)	25
ZA.2.2	Declaration of performance (DoP)	26
ZA.2.2.1	General.....	26
ZA.2.2.2	Content.....	26
ZA.2.2.3	Example of DoP.....	27
ZA.3	CE marking and labelling.....	28
Bibliography	30

Foreword

This document (EN 12878:2014) has been prepared by Technical Committee CEN/TC 298 "Pigments and extenders", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2014 and conflicting national standards shall be withdrawn at the latest by January 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 12878:2005.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of the Construction Production Regulation (CPR).

For relationship with the Construction Production Regulation, see informative Annex ZA, which is an integral part of this document.

EN 12878:2005 has been technically revised as follows:

- a) requirements for Category B regarding water soluble substances in 4.2.3 modified to accommodate non powder preparations;
- b) test method for total chlorine content (5.2.5) changed;
- c) permission to use alternative test methods with proven correlation to standard methods added;
- d) light source amended;
- e) Annex ZA has been changed to consider the new Construction Production Regulation (CPR).

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

საინფორმაციო ნაწილი. სრული ტექსტის სახასიათო შეიძინეთ სტანდარტი.