ᲡᲐᲥᲐᲠᲗᲕᲔᲚᲝᲡ ᲔᲠᲝᲕᲜᲣᲚᲘ ᲡᲢᲐᲜᲦᲐᲠᲢᲘ

ᲛᲘᲜᲐᲠᲔᲕᲔᲑᲘ ᲑᲔᲢᲝᲜᲘᲡ, ᲙᲘᲠᲮᲡᲜᲐᲠᲘᲡ ᲓᲐ ᲗᲮᲔᲕᲐᲦᲘ ᲡᲐᲛᲨᲔᲜᲔᲑᲚᲝ ᲮᲡᲜᲐᲠᲘᲡᲐᲗᲕᲘᲡ. ᲜᲐᲬᲘᲚᲘ 5: ᲛᲘᲜᲐᲠᲔᲕᲔᲑᲘ ᲑᲔᲢᲝᲜᲘᲡ ᲰᲐᲕᲚᲘᲡᲗᲕᲘᲡ. ᲒᲐᲜᲡᲐᲖᲦᲕᲠᲔᲑᲔᲑᲘ, ᲛᲝᲗᲮᲝᲕᲜᲔᲑᲘ, ᲨᲔᲡᲐᲑᲐᲛᲘᲡᲝᲑᲐ ᲓᲐ ᲜᲘᲨᲐᲜᲓᲔᲑᲐ

*ᲡᲐᲘᲜᲤᲝᲠᲛᲐᲪᲘ*Ო ᲛᲝᲜᲐᲪᲔᲛᲔᲑᲘ

- 1 შემუშამებულია საქართველოს სტანდარტების, ტექნიკური რეგლამენტების და მეტროლოგიის ეროვნული სააგენტოს სტანდარტებისა და ტექნიკური რეგლამენტების დეპარტამენტის მიერ
- 2 **ᲓᲐმᲢᲙᲘᲪᲔᲑᲣᲚᲘᲐ ᲓᲐ ᲨᲔᲛᲝᲦᲔᲑᲣᲚᲘᲐ ᲡᲐᲛᲝᲥᲛᲔᲦᲝᲓ** საქართველოს სტანდარტების, ტექნიკური რეგლამენტების და მეტროლოგიის ეროვნული სააგენტოს 2010 წლის 17 მაისის №73 "ს" განკარგულებით
- 3 მიღებულია გარეკანის მეთოდით სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი მნ 934-5 : 2007 "მინარევები ბეტონის, კირხსნარის და თხევადი სამშენებლო ხსნარისათვის. ნაწილი 5: მინარევები ბეტონის ჭავლისთვის. განსაზღვრებები, მოთხოვნები, შესაბამისობა და ნიშანდება"

4 30ᲠᲕᲔᲚᲐᲦ

5 რმბ0სტრ0რმბშლ0ა საქართველოს სტანდარტების, ტექნიკური რეგლამენტების და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2010 წლის 11 მაისი №268-1.3-4426

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

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 934-5

October 2007

ICS 91.100.10

English Version

Admixtures for concrete, mortar and grout - Part 5: Admixtures for sprayed concrete - Definitions, requirements, conformity, marking and labelling

Adjuvants pour béton, mortier et coulis - Partie 5 : Adjuvants pour bétons projetés - Définitions, exigences, conformité, marquage et étiquetage Zusatzmittel für Beton, Mörtel und Einpressmörtel - Teil 5: Zusatzmittel für Spritzbeton - Begriffe, Anforderungen, Konformität, Kennzeichnung und Beschriftung

This European Standard was approved by CEN on 13 August 2007.

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 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 Management Centre has the same status as the official versions.

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



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Cont	ents	Page	
Forewo	ord	3	
1	Scope	5	
2	Normative references	5	
3 3.1 3.2	Terms and definitions	6	
4 4.1 4.2	Requirements	7	
5	Sampling	10	
6	Conformity control	10	
7	Evaluation of conformity	11	
8 8.1 8.2 8.3	Marking and labelling General Designation of admixtures Additional information	11 11	
Annex	A (informative) Content and release of dangerous substances	12	
Annex B.1 B.2 B.3 B.4 B.5 B.6	B (normative) Reference concrete for testing consistence control admixture General	13 13 13 13 14	
Annex C.1	C (normative) Measurement of tensile bond strength		
C.1 C.2 C.3 C.4 C.5	General Preparation of the control and test mix Applying the concrete and storage of specimens Testing Test report	15 15 16	
Annex	Annex ZA (informative) Clauses of this European Standard addressing the provisions of the EU		
ZA.1 ZA.2 ZA.2.1 ZA.2.2 ZA.3	Construction Products Directive	17 19 19 20	
Bibliog	Bibliography		

Foreword

This document (EN 934-5:2007) has been prepared by Technical Committee CEN/TC 104 "Concrete and related products", 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 April 2008, and conflicting national standards shall be withdrawn at the latest by July 2009.

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 has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EC Directive(s).

For relationship with EC Directive(s), see informative Annex ZA, which is an integral part of this document.

This European Standard is a part of the series EN 934 *Admixtures for concrete, mortar and grout* which is comprised of the following parts:

- Part 1: Common requirements1)
- Part 2: Concrete admixtures Definitions, requirements, conformity, marking and labelling
- Part 3: Admixtures for masonry mortar Definitions, requirements, conformity, marking and labelling
- Part 4: Admixtures for grout for prestressing tendons Definitions, requirements, conformity, marking and labelling
- Part 5: Admixtures for sprayed concrete Definitions, requirements, conformity, marking and labelling
- Part 6: Sampling, conformity control and evaluation of conformity.

This European Standard is used with the standards of the series EN 480 which comprises test methods for admixtures.

Subject to the provisions in EN 14487-1, *Sprayed concrete – Part 1: Definitions, specifications and conformity* admixtures covered by EN 934-2 may also be considered for the use in sprayed concrete.

A previous draft of EN 934-5 had been submitted to Formal Vote in 2004 and had formally passed the vote by majority of CEN-members in 2005. Together with this vote, however, some members presented severe technical comments which were agreed upon by the relevant CEN/TC 104/SC 3 to be taken into account by an amendment. In order to avoid the need of using two separate papers in practice, CEN/TC 104 decided, however, not to publish the agreed document but to submit a further consolidated version including the amended issues to UAP, which finally should be published.

The amendments to the final draft prEN 934-5:2004-11 are the following:

- Table 1: requirements in line 5 (Conventional dry material content), 7 (Total chlorine) and 8 (Water soluble chloride);
- Table 2: heading of table; curing conditions in footnote d;

¹⁾ This document is under preparation.

EN 934-5:2007 (E)

- Table 3: heading of table;
- Table 4: heading of table;
- Table 5: minimum frequency of testing of alkali content;
- Annex B: new clauses B.4 and B.5 with more details of testing; new clause B.6, extending the test report;
- Annex C: detailing the testing in clause C.4.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.