



Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
des produits et services

ILNAS-EN 934-6:2019

**Admixtures for concrete, mortar and
grout - Part 6: Sampling, assessment
and verification of the constancy of
performance**

Zusatzmittel für Beton, Mörtel und
Einpressmörtel - Teil 6: Probenahme,
Bewertung und Überprüfung der
Leistungsbeständigkeit

Adjuvants pour béton, mortier et coulis -
Partie 6 : Échantillonnage, évaluation et
vérification de la constance des
performances

03/2019



National Foreword

This European Standard EN 934-6:2019 was adopted as Luxembourgish Standard ILNAS-EN 934-6:2019.

Every interested party, which is member of an organization based in Luxembourg, can participate for FREE in the development of Luxembourgish (ILNAS), European (CEN, CENELEC) and International (ISO, IEC) standards:

- Participate in the design of standards
- Foresee future developments
- Participate in technical committee meetings

<https://portail-qualite.public.lu/fr/normes-normalisation/participer-normalisation.html>

THIS PUBLICATION IS COPYRIGHT PROTECTED

Nothing from this publication may be reproduced or utilized in any form or by any mean - electronic, mechanical, photocopying or any other data carries without prior permission!

EUROPEAN STANDARD ^{ILNAS-EN 934-6:2019} **EN 934-6**
NORME EUROPÉENNE
EUROPÄISCHE NORM

March 2019

ICS 91.100.10; 91.100.30

Supersedes EN 934-6:2001

English Version

**Admixtures for concrete, mortar and grout - Part 6:
Sampling, assessment and verification of the constancy of
performance**

Adjuvants pour béton, mortier et coulis - Partie 6 :
Échantillonnage, évaluation et vérification de la
constance des performances

Zusatzmittel für Beton, Mörtel und Einpressmörtel -
Teil 6: Probenahme, Bewertung und Überprüfung der
Leistungsbeständigkeit

This European Standard was approved by CEN on 26 November 2018.

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, Serbia, 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: Rue de la Science 23, B-1040 Brussels

Contents

Page

European foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Sampling.....	5
4.1 General.....	5
4.2 Sampling from the manufacturer's stock.....	5
4.2.1 General.....	5
4.2.2 Powder admixture (in packages)	5
4.2.3 Liquid admixture.....	6
4.3 Sampling at delivery	6
4.4 Sampling for factory production control	6
4.5 Record	7
5 Assessment and verification of consistency of performance - AVCP	7
5.1 General.....	7
5.2 Conformity criteria.....	7
5.3 Type testing.....	7
5.4 Factory production control	8
5.4.1 General.....	8
5.4.2 Production control manuals	8
5.4.3 Production control records.....	9
5.4.4 Initial inspection of factory and FPC	9
5.4.5 Continuous surveillance of FPC.....	9
5.4.6 Procedure for modifications	10
Annex A (informative) Calibration of measuring equipment.....	11
A.1 General.....	11
A.2 Manufacturing equipment.....	11

European foreword

This document (EN 934-6:2019) 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 September 2019, and conflicting national standards shall be withdrawn at the latest by month year of September 2019.

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

This document supersedes EN 934-6:2001.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This document is cited in harmonized European Standards EN 934 parts 2, 3, 4 and 5. The technical content of this document has not been changed in this revision but in support of the harmonized European Standards in the EN 934 series, the terminology has been amended to align with the CEN guidance given for the drafting of all documents conforming to the requirements of the Construction Products Regulation EU 305/2011.

EN 934, *Admixtures for concrete, mortar and grout* is currently composed of the following parts:

- *Part 1: Common requirements*
- *Part 2: Concrete admixtures — Definitions, requirements, conformity, marking and labelling*
- *Part 3: Admixtures for masonry mortar — Definitions, requirements, conformity and 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, assessment and verification of the constancy of performance*

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This document specifies the procedures for sampling and for the assessment and verification of the constancy of performance (AVCP) for admixtures covered by the series EN 934.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 934-1, *Admixtures for concrete, mortar and grout - Part 1: Common requirements*

EN 934-2, *Admixtures for concrete, mortar and grout - Part 2: Concrete admixtures - Definitions, requirements, conformity, marking and labelling*

EN 934-3, *Admixtures for concrete, mortar and grout - Part 3: Admixtures for masonry mortar - Definitions, requirements, conformity and marking and labelling*

EN 934-4, *Admixtures for concrete, mortar and grout - Part 4: Admixtures for grout for prestressing tendons - Definitions, requirements, conformity, marking and labelling*

EN 934-5, *Admixtures for concrete, mortar and grout - Part 5: Admixtures for sprayed concrete - Definitions, requirements, conformity, marking and labelling*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

batch

quantity of admixture which can be considered to have a uniform composition

Note 1 to entry: A tank load can be considered as the equivalent of a batch.

3.2

responsible person

person appointed by the manufacturer whose duties include implementation of all or a defined part of the production control manual

4 Sampling

4.1 General

Sampling of admixtures shall be carried out in such a way that the resulting sample is representative of the batch to be inspected.

The following procedures shall be used:

- for type testing and in case of dispute, 4.2;
- at time of delivery, 4.3;
- for factory production control, 4.4.

If required, sampling shall be carried out in the presence of all the parties concerned.

4.2 Sampling from the manufacturer's stock

4.2.1 General

Each sample shall represent not more than one batch. For continuous production of an admixture, one sample taken from up to 25 t may be regarded as representative.

4.2.2 Powder admixture (in packages)

The sample shall be composed of sub-samples from 6 packages (bags) or if the total number of packages (bags) is less than 6, from all packages (bags). The sub-samples are to be taken from packages (bags) distributed at random throughout the consignment.

One of the following procedures shall be applied:

- a) where the packages contain up to 500 g, take all the contents of each package;
- b) where the packages contain more than 500 g, use one of the following methods:
 - 1) insert a sampling tube, which takes a core not less than 25 mm in diameter, into the packages so that it takes a core of the material from substantially the entire length of the package;
 - 2) empty one of the packages to be sampled on to a clean dry surface and mix the material. Take at least three portions of not less than 125 g each from different parts of the heap.

The method given in 1) is the preferred method, but if a sampling tube is not available, the method given in 2) shall be used.

Repeat the procedure with each of the other packages to be sampled and thoroughly mix the sub-samples obtained to form one bulk sample. If the bulk sample exceeds 3 kg, it shall be reduced to 3 kg, either by coning and quartering or by use of a sample splitter.

Divide the sample into three equal parts and place each part in a clean, air tight, labelled container. At least one container holding 1 kg shall be kept for future reference. Store container(s) in a place that is protected from moisture, heat and light for one year or until the use-by date, whichever is the shorter period.