Cold applied joint sealants - Part 5: Test method for the determination of the resistance to hydrolysis

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EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 14187-5:2003 sisaldab Euroopa standardi EN 14187-5:2003 ingliskeelset teksti. Käesolev dokument on jõustatud 14.08.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 14187-5:2003 consists of the English text of the European standard EN 14187-5:2003. This document is endorsed on 14.08.2003 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This European Standard describes a test method for determining the resistance to hydrolysis of cold applied joint sealants after treatment at elevated temperature and high humidity	**Scope:** This European Standard describes a test method for determining the resistance to hydrolysis of cold applied joint sealants after treatment at elevated temperature and high humidity

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Võtmesõnad: cold application, construction, construction materials, holding, hydrolytic stability, joint filling, joint sealants, joint sealings, materials, road construction, test duration, test pieces, test temperatures, testing, testing conditions, testing devices

EUROPEAN STANDARD

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English version

Cold applied joint sealants - Part 5: Test method for the determination of the resistance to hydrolysis

Mastics pour joints appliqués à froid - Partie 5: Méthodes d'essai pour la détermination de la résistance à l'hydrolyse

Kalt verarbeitbare Fugenmassen - Teil 5: Prüfverfahren zur Bestimmung der Beständigkeit gegen Hydrolyse

This European Standard was approved by CEN on 25 March 2003.

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 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 Management Centre has the same status as the official versions.

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

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Foreword

This document (EN 14187-5:2003) has been prepared by Technical Committee CEN/TC 227 "Road materials", 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 December 2003, and conflicting national standards shall be withdrawn at the latest by March 2005.

This European Standard is one of a series of standards as listed below:

EN 14187-1, *Cold applied joint sealants — Part 1: Test method for the determination of the rate of cure.*

EN 14187-2, *Cold applied joint sealants — Part 2: Test method for the determination of tack free time.*

EN 14187-3, *Cold applied joint sealants — Part 3: Test method for the determination of self-levelling properties*.

EN 14187-4, *Cold applied joint sealants — Part 4: Test method for the determination of the change in mass and volume after immersion in test fuel.*

EN 14187-5, *Cold applied joint sealants — Part 5: Test method for the determination of the resistance to hydrolysis*.

EN 14187-6, *Cold applied joint sealants — Part 6: Test method for the determination of the adhesion/cohesion properties after immersion in chemical liquids.*

EN 14187-7, *Cold applied joint sealants — Part 7: Test method for the determination of the resistance to flame*.

EN 14187-8, *Cold applied joint sealants — Part 8: Test method for the determination of the artificial weathering by UV-irradiation*.

prEN 14187-9, *Cold applied joint sealants — Part 9: Function test.*[1)]

No existing European Standard is superseded.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard describes a test method for determining the resistance to hydrolysis of cold applied joint sealants after treatment at elevated temperature and high humidity.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For

1) In preparation.

dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 26927:1990, *Building construction - Jointing products - Sealants - Vocabulary (ISO 6927:1981).*

EN ISO 868, *Plastics and ebonite - Determination of indentation hardness by means of a durometer (shore hardness) (ISO 868:2003).*

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 26927:1990 apply.

4 Principle

Test specimen of the cold applied joint sealant is prepared in a round mould and treated for 14 days in an autoclave at elevated temperature and high humidity. The hardness of the test specimen is recorded before and after treatment at high humidity and temperature.

5 Apparatus and materials

5.1 Round moulds of polyethylene, with a diameter of 50 mm to 70 mm and a depth of 10 mm.

5.2 Autoclave from stainless steel, for treatment of the specimens of the cold applied joint sealant at elevated temperature and high humidity.

5.3 Convection type oven, controllable between 60 °C to 100 °C and accurate to ± 2 °C.

5.4 Apparatus for the measurement of Shore A hardness conforming to EN ISO 868.

6 Preparation of test specimens

Clean the round moulds (see 5.1) and fill with sealant previously conditioned for 24 h at (23 ± 2) °C. The test is carried out with each three test specimens.

The following precautions shall be taken:

— avoid the formation of air bubbles;

— trim the sealant surface so that it is flush with the border of the round mould.

7 Conditioning

Condition the test specimen for 28 days at (23 ± 2) °C and (50 ± 5) % relative humidity to allow the complete cure.

8 Procedure

8.1 Test temperature

Carry out the test at the following temperatures: