SLOVENSKI STANDARD
SIST EN 13880-6:2019

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Toplo nanosljive tesnilne mase za stike - 6. del: Metoda priprave preskušancev

Hot applied joint sealants - Part 6: Method for the preperation of samples for testing

Heiß verarbeitbare Fugenmassen - Teil 6: Prüfverfahren zur Vorbereitung von Proben für die Prüfung

Produits de scellement de joints appliqués à chaud - Partie 6 : Méthode d'essai pour la préparation des échantillons destinés à l'essai

Ta slovenski standard je istoveten z: **EN 13880-6:2019**

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91.100.50	Veziva. Tesnilni materiali	Binders. Sealing materials
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EUROPEAN STANDARD

NORME EUROPÉENNE

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EN 13880-6

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ICS 93.080.20

Supersedes EN 13880-6:2004

English Version

Hot applied joint sealants - Part 6: Method for the preparation of samples for testing

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This European Standard was approved by CEN on 25 February 2019.

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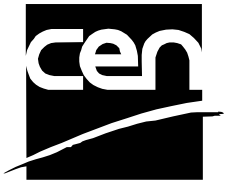

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Contents

Page

European foreword

This document (EN 13880-6:2019) has been prepared by Technical Committee CEN/TC 227 "Road materials", the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by October 2019, and conflicting national standards shall be withdrawn at the latest by October 2019.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 13880-6:2004

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

— EN 13880-1, *Hot applied joint sealants — Part 1: Test method for the determination of density at 25 °C*

— EN 13880-2, *Hot applied joint sealants — Part 2: Test method for the determination of cone penetration at 25 °C*

— EN 13880-3, *Hot applied joint sealants — Part 3: Test method for the determination of penetration and recovery (resilience)*

— EN 13880-4, *Hot applied joint sealants — Part 4: Test method for the determination of heat resistance — Change in penetration value*

— EN 13880-5, *Hot applied joint sealants — Part 5: Test method for the determination of flow resistance*

— EN 13880-6, *Hot applied joint sealants — Part 6: Test method for the preparation of samples for testing*

— EN 13880-7, *Hot applied joint sealants — Part 7: Function testing of joint sealants*

— EN 13880-8, *Hot applied joint sealants — Part 8: Test method for the determination of the change in weight of fuel resistance joint sealants after fuel immersion*

— EN 13880-9, *Hot applied joint sealants — Part 9: Test method for the determination of compatibility with asphalt pavements*

— EN 13880-10, *Hot applied joint sealants — Part 10: Test method for the determination of adhesion and cohesion following continuous extension and compression*

— EN 13880-11, *Hot applied joint sealants — Part 11: Test method for the preparation of asphalt test blocks used in the function test and for the determination of compatibility with asphalt pavements*

— EN 13880-12, *Hot applied joint sealants — Part 12: Test method for the manufacture of concrete test blocks for testing (recipe methods)*

— EN 13880-13, *Hot applied joint sealants — Part 13: Test method for the determination of the discontinuous extension (adherence test)*

The major change in this edition is in the apparatus. In Clause 5, the method has been opened to make it possible to use any heating equipment providing a uniform heating of the sealant sample.

In Clause 6, the heating temperature and heating time has been more specified. The heating time has been changed from 6 h to 4 h.

The terms and definitions in Clause 3 have been adapted to EN 58.

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 describes a method for preparation of a representative test sample, heating of the test sample and pouring of test specimens for testing hot applied joint sealants for use in joints in concrete pavements for roads, airfields and other trafficked areas.

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 14188-1, *Joint fillers and sealants - Part 1: Specifications for hot applied sealants*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 14188-1 and the following 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
sample
one or more original container of the hot applied joint sealant, with a total mass of at least 10 kg

3.2
spot sample
sample, taken in a single operation at a single place and time

[SOURCE: EN 58:2012, 2.9]

3.3
composite sample
sample made up by the mixing of several spot samples

[SOURCE: EN 58:2012, 2.1]

3.4
vertical straight-through sample
sample taken by drawing a sampling device through the total depth of the material under examination and thereby including all layers of the material

3.5
test specimen
piece with certain dimensions according to the test standards, such as sealant moulded between concrete blocks

3.6
safe heating temperature
maximum temperature as recommended by the manufacturer to which the sealant can be heated for a period of 4 h

4 Principle

A representative laboratory sample of a sealant is heated uniformly. If nothing else specified, the hot applied joint sealant is heated for 4 h at the safe heating temperature before pouring the test specimens.

5 Apparatus

5.1 An apparatus that can heat an inner container with the sample in a uniform way. This can be an oil bath, an air heat chamber or some direct electrical heater providing uniform heat transfer to the inner container. The temperature of the apparatus shall be controllable at all time and ensure a careful heating of the sealant up to the safe heating temperature declared by the manufacturer of the sealant. The apparatus temperature shall at all times ensure that the sealant temperature is constantly at the safe heating temperature and the apparatus temperature shall not exceed the safe heating temperature + 5 °C. The heating time to be measured starts when the sealant has reached 5 °C below the safe heating temperature.

If an oil bath is used, an oil with a flash point of not less than 285 °C shall be used.

If a heat chamber is used, it shall be well ventilated.

5.2 An inner container shall be made of metal, not thicker than approximately 1 mm and preferably formed by spinning or pressing. Alternatively the inner container is made of glass or ceramics. The joints, if any, shall be welded or brazed, and shall be leakproof.

The container shall be 100-200 mm in diameter and 100-200 mm deep. It may have a handle and if provided with a loose-fitting lid with facilities for allowing the admission of a stirrer and thermometer.

5.3 Stirrer, for stirring of the joint sealant.

5.4 Thermometer, with an accuracy of ± 1 °C, for temperature measurements between + 100 °C to + 220 °C.

6 Procedure

6.1 Marking, labelling and packing

Report quantity, packing and labelling of the samples as well as any damage to the sample or container.

6.2 Preparation of composite sample

Prepare a composite sample of hot applied sealant, 0,5 kg to 2 kg consisting of spot samples which are 20 g to 100 g vertical straight-through samples of the original container.

Place spot samples of the test sample in the inner container. Alternatively, one big vertical straight - through sample of the original container can be cut out and placed in the inner container.

Heat the composite sample within 1,5 h until the temperature, measured in the sealant, reaches the safe heating temperature. The heating time to be measured starts when the sealant has reached 5 °C below the safe heating temperature.

NOTE 1 Alternatively, hot samples can also be taken, where there are testing facilities at a manufacturing site.

Unless anything else is specified, keep the composite sample at the safe heating temperature + 0 °C/- 5 °C for 4 h ± 10 min.

NOTE 2 Alternatively, a sample can be taken directly at a construction site when the heater has been used for 3 h to 6 h.

6.3 Pouring of the samples to be tested

Pour the heated composite sample to produce test specimens as soon as possible, taking care to avoid any contamination by oil if using an oil bath. If necessary, carefully remove any small air bubbles from the sealant surface, using, for example, a pilot flame or a hot glass rod.

Record the actual temperature at the end of the pouring.

Concrete edges of test specimens can be protected with masking tape.

7 Test report

The sample preparation procedure is reported together with the test method referring to this standard and shall at least include:

a) name of sample;

b) source of sample;

c) batch number and date of manufacturer when appropriate or expiry date;

d) quantity, packing and labelling of the sample as well as any damage of the sample or container;

e) date of preparation;

f) name of the laboratory;

g) safe heating temperature;

h) temperature at the end of pouring;

i) method used to heat the sample.