

Hot applied joint sealants - Test methods - Part 1: Determination of density at 25 °C

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Determination of density at 25 °C

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 13880-1:2003 sisaldab Euroopa standardi EN 13880-1:2003 ingliskeelset teksti. Käesolev dokument on jõustatud 17.09.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 13880-1:2003 consists of the English text of the European standard EN 13880-1:2003. This document is endorsed on 17.09.2003 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.
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Käsitlusala: This standard specifies a procedure for determining the density or relative density of hot applied joint sealants by displacement.	Scope: This standard specifies a procedure for determining the density or relative density of hot applied joint sealants by displacement.
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ICS 93.080.20

Võtmesõnad: construction, construction materials, definition, definitions, density, density (mass/volume), density measurement, joint filling, joint sealings, road construction, testing, testing conditions

ICS 93.080.20

English version

Hot applied joint sealants - Part 1: Test method for the determination of density at 25 °C

Produits de scellement de joints appliqués à chaud - Partie 1: Méthode d'essai pour la détermination de la masse volumique à 25 °C

Heiß verarbeitbare Fugenmassen - Teil 1: Prüfverfahren zur Bestimmung der Dichte bei 25 °C

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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Foreword

This document EN 13880-1:2003 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of an identical text or by endorsement, at the latest by February 2004, and conflicting national standards shall be withdrawn at the latest by March 2005.

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.

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.*

prEN 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 bond testing (recipe methods).*

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

1 Scope

This European Standard describes a method for determining the density of hot applied joint sealants.

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 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).

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

prEN 14188-1:2001, *Joint fillers and sealants — Part 1: Specifications for hot applied sealants*.

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in prEN 14188-1:2001 and the following apply.

3.1

density

mass of a substance divided by its volume at +25 °C

4 Principle

A dry crucible is first weighed in air and then under water at 25 °C. After the crucible has been dried, the sealant is poured into the crucible and heated in the oven. After cooling to ambient temperature, the crucible and its contents are weighed again in air and then under water at 25 °C. The density is calculated from the four weighings.

5 Apparatus

5.1 Tinfoil or aluminium crucible, about 40 mm deep and with a diameter of about 30 mm, fitted with a wire handle with a diameter of about 0,15 mm. A new crucible shall be used for each determination.

5.2 Thermometer, with an accuracy of $\pm 0,2$ °C, for temperature measurements between -1 °C to $+38$ °C.

5.3 Laboratory balance, capable of weighing to an accuracy of 0,001 g.

5.4 Device for bridging the scale pan.

5.5 Water bath, capable of maintaining the temperature to within 0,2 °C.

5.6 Distilled or fully demineralised water, deaerated by boiling prior to testing.

6 Preparation and conditioning of test specimens

6.1 Prepare the test sample according to prEN 13880-6