Surface dressing - Test method - Part 3: Determination of binder aggregate adhesivity by the Vialit plate shock test method

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 12272-3:2003 sisaldab Euroopa standardi EN 12272-3:2003 ingliskeelset teksti.

Käesolev dokument on jõustatud 15.04.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 12272-3:2003 consists of the English text of the European standard EN 12272-3:2003.

This document is endorsed on 15.04.2003 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 specifies the measurement of the binder aggregate adhesivity, and the influence of adhesion agents or interfacial dopes an adhesion characteristics as an aid to design binder aggregate systems for surface dressing. It is not intended that this method is used an site for quality control

Scope:

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ICS 93.080.20

Võtmesõnad: aggregates, binders: materials, dosage, fracture, fractures: materials, impact testing, lay, measurement, measuring techniques, pavements, pavements (roads), road construction, road superstructure, roads, roadstone aggregates, surface treatment, testing, wetting

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English version

Surface dressing - Test method - Part 3: Determination of binder aggregate adhesivity by the Vialit plate shock test method

Enduits superficiels - Méthode d'essai - Partie 3: Détermination de l'adhésivité liants-granulats par mesure de la cohésion Vialit Oberflächenbehandlung - Prüfverfahren - Teil 3: Bestimmung des Adhäsionsvermögens von Bindemitteln und Gesteinskörnung mit dem Schlagprüfverfahren

This European Standard was approved by CEN on 21 November 2002.

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.



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

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Foreword

This document (EN 12272-3:2003) 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 July 2003, and conflicting national standards shall be withdrawn at the latest by April 2005.

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

EN 12272-1, Surface dressing — Test method — Part 1: Rate of spread and accuracy of spread of binder and chippings.

prEN 12272-2, Surface dressing — Test method — Part 2: Visual assessment of defects.

EN 12272-3, Surface dressing — Test method — Part 3: Determination of binder aggregate adhesivity by the Vialit plate shock test method.

Annexes A, B, C and D are informative.

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.

Introduction

The adhesion between binder and chippings is the basis of successful surface dressing. It is important that this bond can be obtained, initially, at the moment of construction and be ensured in cool conditions when the adhesivity problems become dominant binder with damp or dry and dusty chippings. A knowledge of adhesivity enables the choice of a binder and aggregate type for minimum risk, especially for early and late season work.

1 Scope

This European Standard specifies the measurement of the binder aggregate adhesivity, and the influence of adhesion agents or interfacial dopes an adhesion characteristics as an aid to design binder aggregate systems for surface dressing. It is not intended that this method is used on site for quality control.

This European Standard specifies methods of measurement of:

- the mechanical adhesion of the binder to the surface of the aggregate;
- the active adhesivity of the binder to the chippings;
- the improvement of the mechanical adhesion and active adhesivity by adding an adhesion agent either into the mass of the binder or by spraying the interface between binder and chippings;
- the wetting temperature of the binder to the aggregate;
- the variation of adhesivity below the fragility temperature.

This test method is suitable for:

- all the hydrocarbon binders used for surface dressings (e.g. conventional or polymer modified binders, fluxed or cut-back binders or, conventional or polymer modified bituminous emulsions);
- all the aggregate types used for surface dressings;
- following aggregate product sizes:
 - set 1: 2/5 mm, 5/8 mm, 8/11 mm and 11/16 mm;
 - set 2: 2/6 mm, 4/6 mm, 6/10 mm and 10/14 mm.

NOTE Further information concerning the purpose of the test may be found in annex D.

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).

ISO 48, Rubber, vulcanized or thermoplastic — Determination of hardness (Hardness between 10 IRHD and 100 IRHD).