



**SLOVENSKI STANDARD**  
**SIST EN 1097-9:1999/A1:2005**  
**01-december-2005**

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**Preskusi mehanskih in fizikalnih lastnosti agregatov – 9. del: Ugotavljanje odpornosti proti obrabi zaradi gum ježevk – Nordijski preskus**

Tests for mechanical and physical properties of aggregates - Part 9: Determination of the resistance to wear by abrasion from studded tyres - Nordic test

iTeh STANDARD PREVIEW  
Prüfverfahren für mechanische und physikalische Eigenschaften von Gesteinskörnungen - Teil 9: Bestimmung des Widerstandes gegen Verschleiß durch Spikereifen - Nordische Prüfung

[SIST EN 1097-9:1999/A1:2005](#)

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Essais pour déterminer les caractéristiques mécaniques et physiques des granulats - Partie 9: Méthode pour la détermination de la résistance à l'usure par abrasion provoquée par les pneus à crampons - Essai scandinave

**Ta slovenski standard je istoveten z: EN 1097-9:1998/A1:2005**

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**ICS:**

91.100.15      Mineralni materiali in izdelki      Mineral materials and products

**SIST EN 1097-9:1999/A1:2005**      en

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**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN 1097-9:1998/A1**

July 2005

ICS 91.100.15

English version

**Tests for mechanical and physical properties of aggregates -  
Part 9: Determination of the resistance to wear by abrasion from  
studded tyres - Nordic test**

Essais pour déterminer les caractéristiques mécaniques et  
physiques des granulats - Partie 9: Méthode pour la  
détermination de la résistance à l'usure par abrasion  
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Prüfverfahren für mechanische und physikalische  
Eigenschaften von Gesteinskörnungen - Teil 9:  
Bestimmung des Widerstandes gegen Verschleiß durch  
Spikereifen - Nordische Prüfung

This amendment A1 modifies the European Standard EN 1097-9:1998; it was approved by CEN on 20 June 2005.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

**TECHNICAL STANDARD PREVIEW**  
**(standard.preview.cen.eu)**

This amendment 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 Central Secretariat has the same status as the official versions.

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

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

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## Foreword

This European Standard (EN 1097-9:1998/A1:2005) has been prepared by Technical Committee CEN/TC 154 "Aggregates", the secretariat of which is held by BSI.

This Amendment to the European Standard EN 1097-9:1998 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2006, and conflicting national standards shall be withdrawn at the latest by January 2006.

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

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**Foreword**

Delete all occurrences of "pr" preceding EN references.

**1 Scope**

Delete existing **NOTE** and substitute:

"**NOTE** An alternative size fraction 8/11,2 mm for different end uses is given in Annex A. Testing such alternative size fractions may produce results different from those obtained using the 11,2/16 mm size fraction."

**2 Normative references**

Delete all occurrences of "pr" preceding EN references.

Make dated reference of EN 933-1 undated.

**5 Apparatus**

Delete all occurrences of "pr" preceding EN references.

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## 6 Preparation of test specimens (standards.iteh.ai)

Make the dated reference of EN 933-1 undated (3<sup>rd</sup> paragraph).

Delete all occurrences of "pr" preceding EN references.

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**8 Calculation and expression of results**

Delete existing note.

**9.1 Required data**

To the end of the clause, add "e) size fraction tested."

**Annex A**

Re-title existing **Annex A** as clause "**10 Precision**"

**Add the following new Annex A****"Annex A (informative) Alternative size fraction for the Nordic Test**

The following variation to the reference test (see clause 6) given in Table A1 may provide additional information for certain end uses.

**NOTE** The test parameters for the testing of the alternative 8/11,2 mm size fraction involve adjustments to the abrasive charge intended to produce results close to those from the reference 11,2/16 mm size fraction. However, the relationship is not the same for all aggregates and the results for the alternative size should not be expected to be identical to those from the 11,2/16 mm reference fraction.

**Table A.1 - Changes of testing conditions for the alternative size fraction 8/11,2 mm**

Clause	Item	Size fraction 8/11,2 mm	Size fraction 11,2/16 mm (reference)
5	Apparatus		
5.1.2	Set of sieves, (mm)	2–8–10–11,2	2-8-11,2-14-16
5.2.4	Abrasive charge, (mm diameter)	11,1+0,1/-0,5	15,0+0,1/-0,5
5.2.7	Gauge to control ball size		
	Distance between two parallel bars (mm)	(10,7 ± 0,1)	(14,6 ± 0,1)
6	Preparation of test specimens		
	Intermediate sieve, (mm)	10,0	14,0
	Percentage passing intermediate sieve (%)	(65 ± 1)	(65 ±1)
7	Procedure		
	Guard sieve (mm)	4	8
	Sieves used after abrasion and for calculation of $m_2$ (mm)	2-4-10	2-8-14

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