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**Bitumenske zmesi - Preskusne metode - 23. del: Ugotavljanje posredne natezne trdnosti bitumenskih preskušancev**

Bituminous mixtures - Test methods - Part 23: Determination of the indirect tensile strength of bituminous specimens

Asphalt - Prüfverfahren - Teil 23: Bestimmung der indirekten Zugfestigkeit von Asphalt-Probekörpern

Mélanges bitumineux - Méthode d'essais - Partie 23 : Détermination de la résistance à la traction indirecte des éprouvettes bitumineuses

**Ta slovenski standard je istoveten z: prEN 12697-23**

[oSIST prEN 12697-23:2025](https://standards.iteh.ai/catalog/standards/sist/8b1ccc98-1866-46cc-9c9f-452739cc7623/osist-pr-en-12697-23-2025)

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**Bituminous mixtures - Test methods - Part 23:  
Determination of the indirect tensile strength of  
bituminous specimens**

Mélanges bitumineux - Méthode d'essais - Partie 23 :  
Détermination de la résistance à la traction indirecte  
des éprouvettes bitumineuses

Asphalt - Prüfverfahren - Teil 23: Bestimmung der  
indirekten Zugfestigkeit von Asphalt-Probekörpern

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 227.

If this draft becomes a European Standard, 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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## European Foreword

This document (prEN 12697-23:2025) has been prepared by Technical Committee CEN/TC 227 “Road materials”, the secretariat of which is held by BSI.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 12697-23:2017.

prEN 12697-23:2025 includes the following significant technical changes with respect to EN 12697-23:2017:

- [Clause 5.3] the wording, “accuracy of  $\pm 0,2$  kN”, amended to read “nearest 0,1 kN with a maximum permissible error of 0,2 kN”;
- [Clause 5.4] amended to read: “Water bath, thermostatically controlled, or air chamber, capable of maintaining the temperature in the vicinity of the specimen within  $\pm 1$  °C from the test temperature.”
- [Clause 7]. Subclause 7.1 and 7.2 deleted and merged under Clause 7. Completion with following paragraph: “Bring the test specimen to the selected test temperature selected according to Clause 8 with a maximum permissible error of 1 °C. “;
- [Clause 8] deletion of 1st paragraph: “Unless defined elsewhere, the test temperature shall be  $(10 \pm 2)$  °C. Replaced by: “The test temperature shall be selected between +5 °C to +25 °C”;
- [Clause 8], 2nd paragraph. Last two sentences deleted. 1st sentence reworded to NOTE;
- [Clause 9.1] Deletion of paragraph: “The testing machine shall be placed in a room with temperature between 15 °C and 25 °C.”;
- [Clause 10] Rounding of *ITS* changed to the nearest kPa instead of three significant figures.

<https://standards.iteh.ai/catalog/standards/sist/dbfcc098-1860-46ce-9c91-452759ee9631/osist-pren-12697-23-2025>

## 1 Scope

This document specifies a test method for determining the (splitting) indirect tensile strength of cylindrical specimens of bituminous mixtures.

## 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 12697-27, *Bituminous mixtures - Test methods - Part 27: Sampling*

EN 12697-29, *Bituminous mixtures - Test methods - Part 29: Determination of the dimensions of a bituminous specimen*

EN 12697-30, *Bituminous mixtures - Test methods - Part 30: Specimen preparation by impact compactor*

EN 12697-31, *Bituminous mixtures - Test methods - Part 31: Specimen preparation by gyratory compactor*

EN 12697-32, *Bituminous mixtures - Test methods - Part 32: Specimen preparation by vibratory compactor*

EN 12697-33, *Bituminous mixtures — Test methods — Part 33: Specimen prepared by roller compactor*

EN 12697-34, *Bituminous mixtures - Test methods - Part 34: Marshall test*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

### 3.1

#### indirect tensile strength

##### *ITS*

maximum tensile stress calculated from the peak load applied to a cylindrical specimen loaded diametrically until break at specified test conditions

### 3.2

#### cylindrical specimen

laboratory-made (e.g. gyratory or impact-compacted) cylindrical moulded specimen or core taken from a bituminous layer or slab

## 4 Principle

The cylindrical specimen to be tested is brought to the specified test temperature, placed in the compression testing machine between the loading strips, and loaded diametrically along the direction of the cylinder axis with a constant speed of displacement until it breaks. The indirect tensile strength is the maximum tensile stress calculated from the peak load applied at break and the dimensions of the specimen.