

ICS 93.080.20

Supersedes  
DIN EN 12697-46:2012-07

**Bituminous mixtures –  
Test methods –  
Part 46: Low temperature cracking and properties by uniaxial tension  
tests;  
English version EN 12697-46:2020,  
English translation of DIN EN 12697-46:2020-05**

Asphalt –  
Prüfverfahren –  
Teil 46: Widerstand gegen Kälterisse und Tieftemperaturverhalten bei einachsigen  
Zugversuchen;  
Englische Fassung EN 12697-46:2020,  
Englische Übersetzung von DIN EN 12697-46:2020-05

Mélanges bitumineux –  
Méthodes d'essai –  
Partie 46: Fissuration et propriétés à basse température par des essais de traction uniaxiale;  
Version anglaise EN 12697-46:2020,  
Traduction anglaise de DIN EN 12697-46:2020-05

Document comprises 27 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.

*A comma is used as the decimal marker.*

## National foreword

This document (EN 12697-46:2020) has been prepared by Technical Committee CEN/TC 227 “Road materials” (Secretariat: BSI, United Kingdom).

The responsible German body involved in its preparation was *DIN-Normenausschuss Bauwesen* (DIN Standards Committee Building and Civil Engineering), Working Committee NA 005-10-10 AA “Bituminous mixtures (national mirror committee for CEN/TC 227/WG 1), Joint working group with FGSV”.

## Amendments

This standard differs from DIN EN 12697-46:2012-07 as follows:

- a) the title of the standards series has been changed so that it is no longer confined to hot mix asphalt;
- b) [general] the standard has been editorially updated according to the current standard template;
- c) [general] where appropriate, NOTES have been modified according to ISO/IEC Directives — Part 2:2016, 24.5;
- d) [Clause 4] the order of indent 3 and indent 4 has been changed for consistency with subclause 8.3 and subclause 8.4;
- e) [5.1.4] the subclause has been amended to read: Load measurement system, capable of monitoring the axial load up to  $(25 \pm 0,025)$  kN with resolution of 0,001 kN or better and with an accuracy of  $\pm 0,01$  kN or better;
- f) [5.1.4] the excessive and incorrect NOTE has been deleted;
- g) [5.2.1] the accuracy for the dynamic testing device (0,1 Hz) has been completed with “ $\pm$ ”;
- h) [5.2.1] the key to Figure 8 has been corrected;
- i) [5.2.5] it has been clarified that the temperature is measured on a dummy specimen;
- j) [6.1.1] it has been clarified that the main reason for the required calibration is to obtain the correct loading condition;
- k) [7.3.1] a description for the sawing of prismatic specimen has been added to ensure a precise cross section;
- l) [7.3.2] a description for the thickness has been added to enable the sawing of prismatic specimen;
- m) [8.2.2] it has been clarified that the results of the test evaluation are measured (not failure stress and failure temperature);
- n) [8.5.1] the NOTE has been modified and adjusted to normal text according to ISO/IEC Directives — Part 2:2016, 24.5. A description for the suitable test temperature and testing frequency for intermediate low temperatures has been added;
- o) [8.5.3.6] the reason for measuring has been clarified.

## Previous editions

DIN EN 12697-46: 2012-07

English Version

## Bituminous mixtures - Test methods - Part 46: Low temperature cracking and properties by uniaxial tension tests

Mélanges bitumineux - Méthodes d'essai - Partie 46:  
Fissuration et propriétés à basse température par des  
essais de traction uniaxiale

Asphalt - Prüfverfahren - Teil 46: Widerstand gegen  
Kälterisse und Tieftemperaturverhalten bei  
einachsigen Zugversuchen

This European Standard was approved by CEN on 18 November 2019.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

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



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels