

Geosynthetics - Test methods for measuring mass per unit area of clay geosynthetic barriers

This document is a preview generated by EVS

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 14196:2016 sisaldab Euroopa standardi EN 14196:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 14196:2016 consists of the English text of the European standard EN 14196:2016.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 17.02.2016.	Date of Availability of the European standard is 17.02.2016.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 59.080.70, 91.100.50

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:

Aru 10, 10317 Tallinn, Eesti; koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Aru 10, 10317 Tallinn, Estonia; homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

EUROPEAN STANDARD

EN 14196

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2016

ICS 59.080.70; 91.100.50

Supersedes EN 14196:2003

English Version

Geosynthetics - Test methods for measuring mass per unit area of clay geosynthetic barriers

Géosynthétiques - Méthodes d'essai pour la détermination de la masse surfacique des barrières géosynthétiques argileuses bentonitiques

Geokunststoffe - Prüfverfahren zur Bestimmung der flächenbezogenen Masse von geosynthetischen Tondichtungsbahnen

This European Standard was approved by CEN on 19 December 2015.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, 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: Avenue Marnix 17, B-1000 Brussels

Contents	Page
European foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Principle	4
5 Apparatus	4
5.1 Balances	4
5.2 Die or template	4
5.3 Miscellaneous	4
6 Procedure	5
7 Calculation	5
8 Test Report	6
Annex A (normative) Test method for the determination of the mass per unit area of the synthetic component	7
A.1 Apparatus	7
A.1.1 Oven	7
A.1.2 Blowing or suction apparatus	7
A.1.3 Balances	7
A.2 Procedure	7
A.3 Calculation	7

European foreword

This document (EN 14196:2016) has been prepared by Technical Committee CEN/TC 189 “Geosynthetics”, the secretariat of which is held by NBN.

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 August 2016, and conflicting national standards shall be withdrawn at the latest by August 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 14196:2003.

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

1 Scope

This European Standard describes a test method for the laboratory determination of the mass per unit area of a sample of clay geosynthetic barrier (GBR-C) in the condition as received.

Since manufacturers quote mass per unit area at a given moisture content, it is necessary to measure the moisture content.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 9862, *Geosynthetics - Sampling and preparation of test specimens (ISO 9862)*

EN ISO 10318-1, *Geosynthetics - Part 1: Terms and definitions (ISO 10318-1)*

ISO 11465, *Soil quality — Determination of dry matter and water content on a mass basis — Gravimetric method*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 10318-1 and the following apply.

3.1 moisture content

part of the mass of a clay geosynthetic barrier that is absorbed water, expressed as a percentage of the mass of dry clay

4 Principle

The mass per unit area is determined by weighing specimens of known dimensions cut from positions distributed over the full width of the sample in accordance with EN ISO 9862

The moisture content of the clay component of the GBR-C is measured in accordance with ISO 11465.

5 Apparatus

5.1 Balances

Balance of 0,01 g readability for specimens having a mass of up to 200 g.

Balance of 0,1 g readability for specimens having a mass of 200 g or more.

5.2 Die or template

Of known dimensions to a tolerance of $\pm 0,5$ % either square with an edge length not less than 200 mm or circular with a diameter not less than 200 mm.

5.3 Miscellaneous

Knives, spatulas, scoops, quartering cloth, sample splitters etc., as required.