

Plastics - Stretch thermoplastic films for wrapping bales - Requirements and test methods

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 14932:2007 sisaldab Euroopa standardi EN 14932:2006 ingliskeelset teksti. Käesolev dokument on jõustatud 29.01.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 14932:2007 consists of the English text of the European standard EN 14932:2006. This document is endorsed on 29.01.2007 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.
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Käsitlusala: This European Standard specifies the requirements for dimensional, mechanical and optical characteristics of stretch thermoplastic films for wrapping round bales used for outdoor ensiling of forage. This European Standard specifies classifications for durability and solar reflectance of stretch films for wrapping round bales.	Scope: This European Standard specifies the requirements for dimensional, mechanical and optical characteristics of stretch thermoplastic films for wrapping round bales used for outdoor ensiling of forage. This European Standard specifies classifications for durability and solar reflectance of stretch films for wrapping round bales.
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ICS 55.040, 83.140.10

Võtmesõnad:

ICS 55.040; 83.140.10

English Version

Plastics - Stretch thermoplastic films for wrapping bales - Requirements and test methods

Plastiques - Films thermoplastiques étirables pour l'
enrubannage de balles - Exigences et méthodes d'essai

Kunststoffe - Thermoplastische Stretchfolien zum
Umwickeln von Ballen - Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 9 November 2006.

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

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

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Foreword

This document (EN 14932:2006) has been prepared by Technical Committee CEN/TC 249 "Plastics", the secretariat of which is held by IBN/BIN.

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 June 2007, and conflicting national standards shall be withdrawn at the latest by June 2007.

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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

The biological and practical requirements for silage stretch films and the interactions with the machinery, used for the wrapping and handling of round bales, have been considered for the design of this European Standard. However, it is difficult to simulate in laboratory conditions some parameters like leak tightness, oxygen permeability, temperature and the manner they interact.

In order to obtain a high quality for silage it is very important to restrict unwanted microbiological activities to very low levels. Carbon dioxide producing processes can be suppressed by high partial pressure of CO₂ inside the bales. Aerobic processes are, of course, suppressed by low oxygen pressure. Consequently, the wrapped bale should be as gas tight as possible. Therefore this European Standard recommends using 6 layers of film as a minimum.

This European Standard does not include as mandatory a test method for the determination of leak tightness on artificial bale. Nevertheless it is recommended for the manufacturers of stretch films to check this property near an appropriate testing laboratory.

There are discussions regarding how the temperature inside the bale will influence how different types of "good" and "bad" microbiological activities will develop in forage. Although the film can be made of any colour, it is a fact that the pigmentation or colour itself will influence the temperature inside the bale, due to sun-radiation. Therefore, this European Standard also includes a method for the determination of the solar reflectance of stretch films.

1 Scope

This European Standard specifies the requirements for dimensional, mechanical and optical characteristics of stretch thermoplastic films for wrapping round bales used for outdoor ensiling of forage.

This European Standard specifies classifications for durability and solar reflectance of stretch films for wrapping round bales.

This European Standard specifies also test methods to check these requirements.

This European Standard is applicable to white, black or coloured films based on polyethylene and/or ethylene copolymers. The range of film widths considered is from 250 mm up to 1 000 mm.

NOTE 6 layers of stretch films, pre stretched up to 80 %, should be used for wrapping round bales.

2 Normative references

The following referenced documents are indispensable for the application 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 2155-5, *Aerospace series — Test methods for transparent materials for aircraft glazing — Part 5: Determination of visible light transmission*

EN ISO 527-1, *Plastics — Determination of tensile properties — Part 1: General principles (ISO 527-1:1993 including Corr 1:1994)*

EN ISO 527-3, *Plastics — Determination of tensile properties — Part 3: Test conditions for films and sheets (ISO 527-3:1995)*

EN ISO 4892-2:2006, *Plastics — Method of exposure to laboratory light sources — Part 2: Xenon-arc lamps (ISO 4892-2:2006)*

EN ISO 6383-2, *Plastics — Film and sheeting — Determinations of tear resistance — Part 2: Elmendorf method (ISO 6383-2:1983)*

EN ISO 7765-1, *Plastics film and sheeting — Determination of impact resistance by the free-falling dart method — Part 1: Staircase methods (ISO 7765-1:1988)*

ISO 4592, *Plastics — Film and sheeting — Determination of length and width*

ISO 4593, *Plastics — Film and sheeting — Determination of thickness by mechanical scanning*

ISO 9845-1, *Solar energy — Reference solar spectral irradiance at the ground at different receiving conditions — Part 1: Direct normal and hemispherical solar irradiance for air mass 1,5*

ISO 15105-2:2003, *Plastics — Film and sheeting — Determination of gas-transmission rate — Part 2: Equal-pressure method*