



**NSAI**  
Standards

Irish Standard  
I.S. EN 13206:2017+A1:2020

# Plastics - Thermoplastic covering films for use in agriculture and horticulture

**I.S. EN 13206:2017+A1:2020**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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## National Foreword

I.S. EN 13206:2017+A1:2020 is the adopted Irish version of the European Document EN 13206:2017+A1:2020, Plastics - Thermoplastic covering films for use in agriculture and horticulture

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

**EN 13206:2017+A1**

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English Version

**Plastics - Thermoplastic covering films for use in  
agriculture and horticulture**

Plastiques - Films de couverture thermoplastiques  
pour utilisation en agriculture et horticulture

Kunststoffe - Thermoplastische Abdeckfolien für den  
Einsatz in der Landwirtschaft und im Gartenbau

This European Standard was approved by CEN on 14 November 2016 and includes Amendment 1 approved by CEN on 11 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.



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**EN 13206:2017+A1:2020 (E)****European foreword**

This document (EN 13206:2017+A1:2020) has been prepared by Technical Committee CEN/TC 249 “Plastics”, 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 July 2020 and conflicting national standards shall be withdrawn at the latest by July 2020.

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

This document includes Amendment 1 approved by CEN on 11 November 2019.

This document supersedes A1 EN 13206:2017 A1.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

The following technical changes have been made in comparison to EN 13206:2001:

- a minimum thickness of the film is fixed;
- the test methods have been updated as appropriate;
- this revision specifies also test methods for the determination of the chlorine and sulfur contents of the films subjected to use and defines guidelines for installation, use and disposal;
- the classification for the durability of the covering films is extended to a further class.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: 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 the United Kingdom.



## 1 Scope

This European Standard specifies the requirements related to dimensional, mechanical, optical and thermal characteristics of thermoplastic films used for covering permanent or temporary greenhouses and walking tunnels and low tunnels used for forcing and semi-forcing vegetable, fruit and flower crops.

Lay-flat perforated cover films are also in the scope of this European Standard.

It specifies a classification for the durability of covering films and the test methods referred to in this standard.

This European Standard specifies also test methods for the determination of the chlorine and sulfur contents of films subjected to use.

This European Standard is applicable to thermoplastic covering films used in agriculture and horticulture in Europe, in the thickness range 20 µm up to more than 250 µm, based on polyethylene and/or ethylene copolymers materials, of the following types: non-thermal films, thermal clear films and thermal diffusing films.

This European Standard also defines guidance for installation, use and disposal of covering films. It defines the conventional expected lifetime, as well as rules that allow evaluating the remaining use potential in the event of a failure before the normal end-of-use date.

**NOTE** These rules allow estimating the residual value of the films. These provisions only apply to the film itself and the damage it has undergone. Any other problem falls within the scope of professional practices and the general terms and conditions of sale.

## 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 10244-2, *Steel wire and wire products - Non-ferrous metallic coatings on steel wire - Part 2: Zinc or zinc alloy coatings*

EN 13031-1, *Greenhouses - Design and construction - Part 1: Commercial production greenhouses*

EN 16472, *Plastics - Method for artificial accelerated photoageing using medium pressure mercury vapour lamps*

EN ISO 527-1, *Plastics - Determination of tensile properties - Part 1: General principles (ISO 527-1)*

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

EN ISO 4892-1, *Plastics - Methods of exposure to laboratory light sources - Part 1: General guidance (ISO 4892-1)*

EN ISO 4892-2:2013, *Plastics - Methods of exposure to laboratory light sources - Part 2: Xenon-arc lamps (ISO 4892-2:2013)*

EN ISO 4892-3:2016, *Plastics - Methods of exposure to laboratory light sources - Part 3: Fluorescent UV lamps (ISO 4892-3)*

EN ISO 7765-1:2004, *Plastics film and sheeting - Determination of impact resistance by the free-falling dart method - Part 1: Staircase methods (ISO 7765-1:1988)*

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