



National Standards Authority of Ireland

IRISH STANDARD

ENV 1186-14:1999

ICS 67.250

**MATERIALS AND ARTICLES IN CONTACT
WITH FOODSTUFFS - PLASTICS - PART 14:
TEST METHODS FOR 'SUBSTITUTE TESTS'
FOR OVERALL MIGRATION FROM PLASTICS
INTENDED TO COME INTO CONTACT WITH
FATTY FOODSTUFFS USING TEST MEDIA
ISO-OCTANE AND 95% ETHANOL**

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Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN PRESTANDARD
PRÉNORME EUROPÉENNE
EUROPÄISCHE VORNORM

ENV 1186-14

March 1999

ICS 67.250

English version

**Materials and articles in contact with foodstuffs - Plastics - Part
14: Test methods for 'substitute tests' for overall migration from
plastics intended to come into contact with fatty foodstuffs using
test media iso-octane and 95 % ethanol**

Matériaux et objets en contact avec les denrées
alimentaires - Matières plastiques - Partie 14: Méthodes
d'essai pour des 'tests de substitution' pour la migration
globale des matières destinées au contact avec les
denrées alimentaires grasses en utilisant des liquides
simulateurs tels que l'isooctane et l'éthanol à 95 %

Werkstoffe und Gegenstände in Kontakt mit Lebensmitteln
- Kunststoffe - Teil 14: Prüfverfahren für "Ersatzprüfungen"
für die Gesamtmigration aus Kunststoffen, die für den
Kontakt mit fettigen Lebensmitteln bestimmt sind, unter
Verwendung der Prüfmedien Isooctan und 95 % Ethanol

This European Prestandard (ENV) was approved by CEN on 18 February 1999 as a prospective standard for provisional application.

The period of validity of this ENV is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the ENV can be converted into a European Standard.

CEN members are required to announce the existence of this ENV in the same way as for an EN and to make the ENV available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the ENV) until the final decision about the possible conversion of the ENV into an EN is reached.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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

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Foreword

This European Prestandard has been prepared by Technical Committee CEN/TC 194 "Utensils in contact with food", the secretariat of which is held by BSI.

Further Parts of this prestandard have been prepared, and others are in preparation, concerned with the determination of overall migration from plastics materials into food simulants.

Their titles are as follows:

- ENV 1186-1 Guide to the selection of conditions and test methods for overall migration
- ENV 1186-2 Test methods for overall migration into olive oil by total immersion
- ENV 1186-3 Test methods for overall migration into aqueous food simulants by total immersion
- ENV 1186-4 Test methods for overall migration into olive oil by cell
- ENV 1186-5 Test methods for overall migration into aqueous food simulants by cell
- ENV 1186-6 Test methods for overall migration into olive oil using a pouch
- ENV 1186-7 Test methods for overall migration into aqueous food simulants using a pouch
- ENV 1186-8 Test methods for overall migration into olive oil by article filling
- ENV 1186-9 Test methods for overall migration into aqueous simulants by article filling
- ENV 1186-10 Test methods for overall migration into olive oil (modified method for use in cases where incomplete extraction of olive oil occurs)
- ENV 1186-11 Test methods for overall migration into mixtures of ¹⁴C-labelled synthetic triglyceride
- ENV 1186-12 Test methods for overall migration at low temperatures

Further Parts in preparation are as follows:

- ENV 1186-13 Test methods for overall migration at high temperatures

Annex A to this prestandard is normative where applicable.

ENV 1186-14 should be read in conjunction with EN 1186-1.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this European Prestandard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This Part of this European Prestandard describes test methods for 'substitute tests' performed with volatile test media, iso-octane and 95 % v/v aqueous ethanol, for the determination of overall migration from plastics intended to come into contact with fatty foodstuffs at all temperatures and for any period of time.

These test methods are suitable for plastics samples in a wide variety of forms.

The iso-octane and 95 % v/v aqueous ethanol volatile test media used in these test methods are those specified for 'substitute tests' in Commission Directive 82/711/EEC and its subsequent amendments.

The permitted use of 'substitute tests' with volatile test media iso-octane and 95 % v/v aqueous ethanol is specified in Commission Directive 82/711/EEC and its subsequent amendments.

NOTE 1: In addition to the use of iso-octane and 95 % v/v aqueous ethanol as test media for 'substitute tests', Commission Directive 82/711/EEC and its subsequent amendments specifies the use of modified polyphenylene oxide as a test medium for use at temperatures of 100 °C and above. For a test method for overall migration from plastics intended to come into contact with fatty foodstuffs using modified polyphenylene oxide as a test medium, see ENV 1186-13.

NOTE 2: These test methods can also be used for the 'alternative tests' described in Council Directive 82/711/EEC and its subsequent amendments, when the chosen volatile test media are iso-octane and 95 % aqueous ethanol, provided equivalence is shown with olive oil, see EN 1186-1.

2 Normative references

This European Prestandard incorporates by dated and undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to and revisions of any of these publications apply to this European Prestandard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

ISO 648:1977 Laboratory glassware - One mark pipettes

ISO 4788:1980 Laboratory glassware - Graduated measuring cylinders

ISO 8442:1988 Stainless steel and silver plated table cutlery ¹

EN 1186-1:1994 Guide to the selection of conditions and test methods for overall migration

ENV 1186-3:1994 Test methods for overall migration into aqueous food simulants by total immersion

ENV 1186-5:1994 Test methods for overall migration into aqueous food simulants by cell

ENV 1186-7:1994 Test methods for overall migration into aqueous food simulants using a pouch

ENV 1186-9:1994 Test methods for overall migration into aqueous food simulants by article filling

prEN 10088-4 Stainless steels - Technical delivery conditions for sheet/plate and strip for boilers and pressure vessels

¹

A European Standard for stainless steel and silver plated cutlery is in the course of preparation

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