

Steel for packaging - Flat steel products intended for use in contact with foodstuffs, products and beverages for human and animal consumption - Tin coated steel (tinplate)

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>See Eesti standard EVS-EN 10333:2024 sisaldab Euroopa standardi EN 10333:2024 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 27.11.2024.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN 10333:2024 consists of the English text of the European standard EN 10333:2024.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 27.11.2024.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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ICS 67.250

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EUROPEAN STANDARD

EN 10333

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2024

ICS 67.250

Supersedes EN 10333:2005

English Version

## Steel for packaging - Flat steel products intended for use in contact with foodstuffs, products and beverages for human and animal consumption - Tin coated steel (tinplate)

Acier pour emballage - Produits plats en acier destiné à entrer au contact des denrées, produits et boissons pour l'alimentation de l'homme et des animaux - Acier revêtu d'étain (fer blanc ou fer étamé)

Verpackungsblech - Flacherzeugnisse aus Stahl für die Verwendung in Berührung mit Lebensmitteln, Produkten und Getränken für den menschlichen und tierischen Verzehr - Verzinnter Stahl (Weißblech)

This European Standard was approved by CEN on 21 October 2024.

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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.

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

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## European foreword

This document (EN 10333:2024) has been prepared by Technical Committee CEN/TC 459 “ECISS - European Committee for Iron and Steel Standardization”<sup>1</sup>, the secretariat of which is held by AFNOR.

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 May 2025, and conflicting national standards shall be withdrawn at the latest by May 2025.

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 supersedes EN 10333:2005.

EN 10333:2024 includes the following significant technical changes with respect to EN 10333:2005:

- The normative references have been updated;
- Annex A has been revised.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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<sup>1</sup> Through its sub-committee CEN/TC 459/SC 9 “Coated and uncoated flat products to be used for cold forming” (secretariat: AFNOR).

## 1 Scope

This document specifies the composition of the base steel used for the production of tinplate for use in direct contact with foodstuffs or products for human and animal consumption as well as the composition of tin used to coat it. Tinplate can be produced with or without an organic coating.

The main examples of use are:

- drinks cans,
- food cans,
- packaging of dry foods,
- aerosol cans.

The material is chosen in accordance with the conditions for its use.

This document does not apply to categories of steel other than steel for packaging intended for use in contact with foodstuffs, products or beverages for human or animal consumption.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 610, *Tin and tin alloys — Ingot tin*

EN 10202:2022, *Cold reduced tinmill products — Electrolytic tinplate and electrolytic chromium/chromium oxide coated steel*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

### 3.1

#### **tinplate**

cold-rolled blackplate coated on at least one side with a layer of tin

Note 1 to entry: The mass of the coating can reach up to 15,1 g/m<sup>2</sup>.

### 3.2

#### **blackplate**

low-carbon mild steel which has been subjected to cold reduction, is used mainly in the manufacture of tinplate and electrolytic chromium/chromium oxide coated steel and has a minimum iron content greater than 95% by mass