

**English version**

Steel for packaging

**Flat steel products intended for use in contact with  
foodstuffs, products and beverages for human and  
animal consumption**

**Non alloyed electrolytic chromium/chromium oxide coated steel**

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 non allié revêtu de  
chrome

Verpackungsblech – Flacherzeug-  
nisse aus Stahl für die Verwendung in  
Berührung mit Lebensmitteln, Produk-  
ten und Getränken für den mensch-  
lichen und tierischen Verzehr –  
Unlegierter elektrolytisch spezialver-  
chromter Stahl

This European Standard was approved by CEN on 2005-03-07.

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 Management Centre or to any CEN member.

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**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

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Foreword

This document (EN 10335:2005) has been prepared by Technical Committee ECISS/TC 26 "Tinmill products - Qualities, dimensions, tolerances and specific tests", the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by October 2005, and conflicting national standards shall be withdrawn at the latest by October 2005.

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

## 1 Scope

This document specifies the base steel to be used and the composition of the metallic coating to be used for the manufacture of lacquered electrolytic chromium/chromium oxide coated steel and articles which, as a finished product, are intended for use in direct contact with foodstuffs or products for human or animal consumption.

The main examples of use are:

- drinks cans,
- food cans,
- closures and ends.

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

This standard 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 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 10202:2001, *Cold reduced tinmill products – Electrolytic tinplate and electrolytic chromium/chromium oxide coated steel*

EN 10204, *Metallic products – Types of inspection documents*

EN 10334, *Steel for packaging - Flat steel products intended for use in contact with foodstuffs, products and beverages for human and animal consumption - Non-coated steel (blackplate)*

## 3 Terms and definitions

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

### 3.1

#### **electrolytic chromium/chromium oxide coated steel**

cold-rolled blackplate that is coated on both sides with a layer of chromium. The mass of the coating (total chromium) can reach 140 mg/m<sup>2</sup> per side.

### 3.2

#### **blackplate**

See EN 10334

### 3.3

#### **steel intended for use in contact with foodstuffs**

See EN 10334



**3.4**  
**steel for packaging**  
See EN 10334

**3.5**  
**steel for other applications than packaging**  
See EN 10334

## **4 Information to be provided by the purchaser**

The purchaser shall provide information at the time of enquiry and order in accordance with the requirements of EN 10202.

NOTE Furthermore, the purchaser can specify the type of oil suitable for food contact to be used when the product is delivered oiled.

## **5 Dimensions and dimensional tolerances**

The nominal dimensions shall be agreed at the time of enquiry and order.

The dimensional tolerances shall meet the requirements of Clause 9 of EN 10202:2001.

## **6 Requirements**

### **6.1 Base metal**

The composition of the base metal shall meet the requirements of EN 10334.

NOTE As described in EN 10202:2001 informative Annex A, tighter limits may be necessary for certain elements particularly for fabrication reasons.

### **6.2 Chromium coating**

The chromium coating shall comply with the requirements of EN 10202.

### **6.3 Oiling**

Unless otherwise specified, at the time of enquiry and order, the products delivered shall be lubricated with an oil which is suitable for contact with foodstuffs, as defined in EN 10202.

## **7 Checks**

At the request of the purchaser, conformity with the order requirements shall be proven in accordance with this standard. Unless otherwise specified, the inspection document 2.1 shall be used in accordance with EN 10204.

## **8 Designation**

The designation shall comply with EN 10202.

## 9 Marking, labelling, packaging

Each coil or bundle shall display a label indicating the reference to this standard, the name and trademark of the manufacturer and the batch identification.

The packaging specifications shall be agreed at the time of enquiry and order.

## Bibliography

- [1] Directive 89/109/EEC of 21 December 1988 on materials and articles intended for use into contact with foodstuffs.
- [2] Directive 94/62/EC of the European Parliament and Council of 20 December 1994 on packaging and packaging waste
- [3] Council of Europe – Guidelines on metals and alloys intended to come into contact with foodstuffs
- [4] EN 10079, *Definition of steel products*
- [5] EN ISO 14284, *Steel and iron – Sampling and preparation of samples for the determination of chemical composition (ISO 14284:1996)*



