

# Aluminium and aluminium alloys — Scrap —

## Part 10: Scrap consisting of used aluminium beverage cans

The European Standard EN 13920-10:2003 has the status of a  
British Standard

ICS 13.030.50; 77.120.10

## National foreword

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The UK participation in its preparation was entrusted to Technical Committee NFE/35, Light metals and their alloys, which has the responsibility to:

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## Aluminium and aluminium alloys - Scrap - Part 10: Scrap consisting of used aluminium beverage cans

Aluminium et alliages d'aluminium - Scrap (matières premières pour recyclage) - Partie 10: Scrap composé de boîtes boisson usagées en aluminium

Aluminium und Aluminiumlegierungen - Schrott - Teil 10: Schrott aus gebrauchten Aluminium-Getränkedosen

This European Standard was approved by CEN on 28 February 2003.

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## Foreword

This document (EN 13920-10:2003) has been prepared by Technical Committee CEN/TC 132, "Aluminium and aluminium alloys", 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of an identical text or by endorsement, at the latest by October 2003, and conflicting national standards shall be withdrawn at the latest by October 2003.

Within its programme of work, Technical Committee CEN/TC 132 has entrusted CEN/TC132/WG 20 "Scrap" to prepare the following standard.

EN 13920 comprises the following parts under the general title "*Aluminium and aluminium alloys — Scrap*" :

- ¾ *Part 1: General requirements, sampling and tests*
- ¾ *Part 2: Unalloyed aluminium scrap*
- ¾ *Part 3: Wire and cable scrap*
- ¾ *Part 4: Scrap consisting of one single wrought alloy*
- ¾ *Part 5: Scrap consisting of two or more wrought alloys of the same series*
- ¾ *Part 6: Scrap consisting of two or more wrought alloys*
- ¾ *Part 7: Scrap consisting of castings*
- ¾ *Part 8: Scrap consisting of non-ferrous materials from shredding processes destined to aluminium separation processes*
- ¾ *Part 9: Scrap from aluminium separation processes of non-ferrous shredded materials*
- ¾ *Part 10: Scrap consisting of used aluminium beverage cans*
- ¾ *Part 11: Scrap consisting of aluminium-copper radiators*
- ¾ *Part 12: Turnings consisting of one single alloy*
- ¾ *Part 13: Mixed turnings consisting of two or more alloys*
- ¾ *Part 14: Scrap from post-consumer aluminium packagings*
- ¾ *Part 15: Decoated aluminium scrap from post-consumer aluminium packagings*
- ¾ *Part 16: Scrap consisting of skimmings, drosses, spills and metallics*

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

## 1 Scope

This European Standard specifies characteristics, form, chemical composition and metal yield of scrap consisting of used aluminium beverage cans (UBC). Complete cans, after removal of the liquid content, even if not obtained from post-consumer collection schemes, are within the scope of this standard and are also regarded as UBC.

NOTE This scrap is commercially known as UBC (Used Beverage Cans).

## 2 Normative references

This European Standard incorporates by dated or 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 or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

prEN 12258-3:2000, *Aluminium and aluminium alloys — Terms and definitions - Part 3: Scrap.*

EN13920-1:2003, *Aluminium and aluminium alloys — Scrap — Part 1: General requirements, sampling and tests.*

## 3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in prEN 12258-3:2000 and EN 13920-1:2003 apply.

## 4 Ordering information

The ordering information shall include :

- ¾ the number of this European Standard (EN 13920-10);
- ¾ the scrap category (scrap consisting of used aluminium beverage cans);
- ¾ the gross mass of the consignment;
- ¾ the definition of the beginning and end of the period during which the scrap shall be delivered;
- ¾ any characteristics deviating from those specified under 5.1, e.g. size of pieces, presence of foreign material.

The ordering information should include:

- ¾ information about the origin of the scrap;
- ¾ any information about size and surface condition of the pieces, whenever meaningful.

## 5 Requirements

### 5.1 General

In addition to the requirements specified in EN 13920-1, the requirements given in 5.2, 5.3, 5.4 and 5.5 shall be met.

If the scrap does not meet all these requirements, the supplier shall notify the deviating characteristics to the purchaser and shall obtain his agreement before shipment.

### 5.2 Characteristics

The scrap shall not contain more than 2 % (mass fraction) of moisture and not more than 5 % (mass fraction) of total volatile substances. The scrap shall be free from any other foreign material, e.g. free iron and lead, and shall exclusively consist of beverage cans. It shall be free from burnt or oxidized cans and aluminium foil.

### 5.3 Form of scrap

UBC scrap shall be supplied in bales having dimensions not exceeding (800 1 000 1 200) mm and a specific mass between 200 kg/m<sup>3</sup> and 350 kg/m<sup>3</sup>.

Alternatively, UBC scrap may be supplied in briquettes having dimensions not exceeding (400 400 600) mm and a specific mass between 350 kg/m<sup>3</sup> and 700 kg/m<sup>3</sup>.

### 5.4 Chemical composition

UBC scrap, after decoating and melting, shall have the chemical composition as shown in Table 1.

**Table 1 — Chemical composition**

Composition in percent (mass fraction)

Si	Fe	Cu	Mn	Mg	Ni	Zn	Ti	Pb	Sn	others each	others total	Al <sup>a</sup>
max.	max.	max.	max.	max.	max.	max.	max.	max.	max.	max.	max.	min.
0,30	0,50	0,20	1,1	1,3	0,01	0,05	0,05	0,01	0,05	0,05	0,15	remainder

<sup>a</sup> The aluminium content is the difference between 100 % and the total of all the other elements present with values no less than 0,010 % rounded to the second decimal (before the calculation is made).

### 5.5 Metal yield

The metal yield of used beverage cans as determined in accordance with EN 13920-1 shall be 88 %.

## 6 Classification procedure, treatment of non-conformities and arbitration

The classification procedure which includes sampling and tests, the treatment of non-conformities and arbitration shall be in accordance with EN 13920-1, as appropriate.

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