

English version

Packaging - Requirements for measuring and verifying the four heavy metals and other dangerous substances present in packaging, and their release into the environment - Part 2: Requirements for measuring and verifying dangerous substances present in packaging, and their release into the environment

Emballages - Exigences pour la mesure et la vérification des quatre métaux lourds et autres substances dangereuses présents dans les emballages, et leur cession dans l'environnement - Partie 2: Exigences pour la mesure et la vérification des substances dangereuses présentes dans les emballages, et leur cession dans l'environnement

Verpackung - Anforderungen zur Messung und Feststellung der vier Schwermetalle und der anderen gefährlichen Substanzen in Verpackungen und deren Freisetzung in die Umwelt - Teil 2: Anforderungen zur Messung und Feststellung von gefährlichen Substanzen in Verpackungen und deren Freisetzung in die Umwelt

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

Page

Foreword.....	3
Introduction	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 The packaging and packaging waste Directive 94/62/EC requirements	6
5 Subsequent Directives to be taken in account.....	6
5.1 The Incineration Directives	6
5.2 The Directive on the landfill of waste	7
6 Summary of the present situation in industry	7
7 Identification and minimisation of dangerous substances in packaging.....	7
7.1 General principle.....	7
7.2 Identification.....	8
7.2.1 The 'Upstream Approach' as the basic principle	8
7.2.2 The Identification procedure	8
7.2.3 The use of Safety Data Sheets for determination of presence of dangerous substances and preparations	8
7.3 Release to the environment.....	9
7.4 Minimisation	9
8 Basis for a proposed new standard for presuming compliance with Annex II, paragraph 1, indent 3 of Directive 94/62/EC	9
8.1 The principle.....	9
8.2 Determination of substances to be considered for minimisation	10
8.3 Conformity with the minimisation requirement.....	10
9 Conclusions	10
Annex A (informative) Decision Tree - Minimisation of dangerous substances or preparations and demonstration of conformity	11
Annex B (informative) Information on current regulation	12
Annex C (Informative) Examples of Safety Data Sheets.....	15
Bibliography	28

Foreword

This document (CEN/TR 13695-2:2004) has been prepared by Technical Committee CEN/TC 261 "Packaging", the secretariat of which is held by AFNOR.

This document supersedes CR 13695-2:2002.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directives, see informative Annex B, which is an integral part of this document.

This Technical Report forms one of a series of standards and reports prepared under Mandate M/200 rev.3 and the Second Standardisation Mandate M/317 given to CEN by the European Commission and the European Free Trade Association to support the European Parliament and Council Directive on Packaging and Packaging Waste [94/62/EC]. The procedure for applying this Technical Report in conjunction with the other mandated standards and reports is specified in EN 13427.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Report: 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 the United Kingdom.

Introduction

The European Commission gave a mandate to CEN for promoting the preparation of European Standards and CEN Reports in order to support the application of the Directive 94/62/EC of 20 December 1994, on Packaging and Packaging Waste, in particular to elaborate a CEN Report 'Requirements for measuring and verifying heavy metals and other dangerous substances present in packaging, and their release into the environment'.

NOTE The Directive 94/62/EC is amended by European Parliament and Council Directive 2004/12/EC of 11 February 2004

Part 1 of the CEN Report 'Requirements for measuring and verifying the four heavy metals present in packaging, and their release into the environment' has been previously released, (CR 13695-1) due to the priority given in Article 11(1) of the Directive to the four heavy metals explicitly mentioned: Lead, Cadmium, Mercury and Chromium VI.

This document is Part 2 to the CEN Report CR 13695 related to other dangerous substances. It refers to the end-of-life treatment of packaging by incineration or landfilling.

The task of the working group WG 8 'Heavy metals and other dangerous substances' had been attributed by a resolution of CEN TC 261/SC 4.

Have been considered for the development of this work:

- the existing European or national regulations (Directives);
- the CEN standardisation on waste TC 292;
- the OECD environment monograph series.

A detailed information on the regulatory context is given in Annex B; however this work is expected to be compatible with any further evolution of the related regulation, as it is independent of any specific case.

With regard to the number and diversity of substances, which may be considered as dangerous to the environment, there are no currently available general standardised methods for the systematic measurements of their presence in emissions, ash or leachate, when packaging or residues from management operations or packaging waste are incinerated or landfilled. The task of elaborating specific standardised methods for each substance and applicable in each practical case would be extremely complex and time consuming. This is the reason why a methodology to estimate or calculate these substances based on the use of Safety Data Sheets (according to Directive 91/155/EEC) has been developed.

A simple and efficient assessment method suitable for small and medium sized suppliers of packaging is proposed, based preferentially on an upstream approach (CR 13695-1, 8.1).

Guidelines are provided to identify and minimise dangerous substances and a methodology is proposed to assess the compliance with the requirements of the Directive.

1 Scope

This document specifies the methodology and procedure for determining the presence and minimisation of other dangerous substances in relation with Annex II Para 1 Indent 3 of Directive 94/62/EC. This document is intended to be of practical use, and to enable efficient application of the Directive 94/62/EC, even for small and medium sized companies in the packaging industry, providing them with a methodology for assessing compliance with the Directive.

This document cannot by itself provide presumption of conformity. The procedure for applying this document is contained in EN 13427.

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 13193:2000, *Packaging – Packaging and the environment – Terminology*.

EN 13428, *Packaging – Requirements specific to manufacturing and composition – Prevention by source reduction*.

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13193:2000 and Article 3 of Directive 94/62/EC and the following apply.

3.1

substances

chemical elements and their compounds in the natural state or obtained by any production process, including any additive necessary to preserve the stability of the product, and any impurity deriving from the production process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition

NOTE A substance may be chemically very well defined (e.g. acetone) or a complex mixture of constituents of variable composition (e.g. aromatic distillates). For certain complex substances, some individual constituents have been identified

[Directive 67/548/EEC as amended by 2001/59/EC Annex VI, paragraph 1.7.1]

3.2

preparations

mixtures or solutions composed of two or more substances

[Directive 67/548/EEC]

3.3

safety data sheet

documentation provided by any person established within the community who is responsible for placing a dangerous substance or preparation on the market, whether the manufacturer, importer or distributor

NOTE The Directive requires that documentation to be provided to any recipient who is an industrial user of the substance or preparation and to contain the information required of the dangerous substance or preparation

[taken from Article 1(1) of Directive 91/155/EEC as amended by Directive 2001/58/EC]