



National Standards Authority of Ireland

STANDARD

I.S. EN 13431:2004

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55.020

**PACKAGING - REQUIREMENTS FOR
PACKAGING RECOVERABLE IN THE FORM
OF ENERGY RECOVERY, INCLUDING
SPECIFICATION OF MINIMUM INFERIOR
CALORIFIC VALUE**

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English version

**Packaging - Requirements for packaging recoverable in the form
of energy recovery, including specification of minimum inferior
calorific value**

Emballage - Exigences relatives aux emballages
valorisables énergétiquement, incluant la spécification
d'une valeur calorifique inférieure minimale

Verpackung - Anforderungen an Verpackungen für die
energetische Verwertung, einschließlich Spezifikation eines
Mindestheizwertes

This European Standard was approved by CEN on 5 May 2004.

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 Central Secretariat or to any CEN member.

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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of 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.



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Contents	Page
Foreword	3
Introduction	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Specification of Minimum Inferior Calorific Value (Minimum Net Calorific Value)	6
5 Requirements	6
6 Procedures	7
Annex A (normative) Determination of Calorific Gain and specification of the theoretical minimum inferior calorific value (minimum net calorific value)	8
Annex B (informative) Derivation of a minimum inferior calorific value (minimum net calorific value) for packaging to allow optimisation of energy recovery in a real industrial system	10
Annex C (informative) Substances and materials liable to have a negative influence on the energy recovery process and materials, combinations of materials or design of packaging liable to create problems during energy recovery	14
Annex D (informative) Example of format for the statement of compliance with this document	15
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 94/62/EC	16
Bibliography	17

Foreword

This document (EN 13431:2004) has been prepared by Technical Committee CEN/TC 261 "Packaging", 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 January 2005, and conflicting national standards shall be withdrawn at the latest by January 2005.

This document supersedes EN 13431:2000.

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

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This document forms one of a series of standards and reports prepared under mandates M 200 rev.3 and M/317 given to CEN by the European Commission and the European Free Trade Association to support the European Council and Parliament Directive on Packaging and Packaging Waste [94/62/EC]. The procedure for applying this document 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 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.

EN 13431:2004 (E)

Introduction

The Directive on Packaging and Packaging Waste (94/62/EC) defines requirements for packaging to be considered recoverable. This document amplifies these requirements with respect to energy recovery. The European Standard EN 13427 provides a framework within which this and four other standards may be used together to support a claim that a packaging is in compliance with the essential requirements for packaging to be placed on the market as required by the Directive.

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

The purpose of packaging is the containment, protection, handling, delivery and presentation of products. Energy recovery of used packaging is one of several recovery options within the overall life cycle of packaging. In order to save resources and minimise waste, the whole system in which the packaging takes part should be optimised. This includes prevention as well as reuse and recovery of packaging waste.

This document presents a framework for assessment to determine whether the requirements of this document have been met. Its approach is similar to that of systems standards such as the EN ISO 9000 series or an environmental management system such as EN ISO 14001.

Since packaging waste used for energy recovery substitutes for other fuels, total system optimisation includes production of heat and/or power. This document defines and specifies the thermodynamic requirements for packaging to allow the incineration with energy recovery of packaging waste, but does not consider the transformation and use of the produced energy. Both packaging and recovery technologies are subject to continuous improvement.

Annex A derives the theoretical concept of calorific gain. Annexes B and C set out supporting regulations as well as conclusions reached during the preparation of the text. It is assumed that the heat generated during the incineration process shall be recovered as far as practicable, but it is outside the Scope of this document to take any standpoint on plant efficiency.

Requirements for substances and materials liable to have a negative influence on the energy recovery process are specified in EN 13428. According to the discussion in Annex C, there is no need for further requirements.

Materials, combinations of materials or design of packaging liable to create problems during energy recovery are discussed in Annex C. It is concluded that packaging design and combination of materials do not create problems for the energy recovery process.

Annex D is an aid to prove compliance with the requirements.

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