



**NSAI**  
Standards

Irish Standard  
I.S. EN 50574:2012

# Collection, logistics & treatment requirements for end-of-life household appliances containing volatile fluorocarbons or volatile hydrocarbons

## I.S. EN 50574:2012

*Incorporating amendments/corrigenda issued since publication:*

EN 50574:2012/AC:2012

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I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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Corrigendum to EN 50574:2012

English version

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In the Scope, **delete** the following note:

NOTE This European Standard has been prepared to fulfil the requirements of Directive 2002/96/EC but does not preclude the procedures described herein from being used to treat appliances that are not commonly found in private households.

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November 2012

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**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN 50574**

May 2012

ICS 13.030.30; 13.030.40; 97.030

English version

**Collection, logistics & treatment requirements for end-of-life household appliances containing volatile fluorocarbons or volatile hydrocarbons**

Exigences de collecte, logistique et traitement pour la fin de vie des appareils domestiques contenant des fluorocarbures volatils ou des hydrocarbures volatils

Anforderungen an die Sammlung, Logistik und Behandlung von Altgeräten aus dem Haushalt die flüchtige Fluorkohlenwasserstoffe oder flüchtige Kohlenwasserstoffe enthalten

This European Standard was approved by CENELEC on 2012-03-26. CENELEC 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 CEN-CENELEC Management Centre or to any CENELEC 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 CENELEC 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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**CENELEC**

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

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## **Foreword**

This document (EN 50574:2012) was prepared by CLC/TC 111X/WG 04, "Environment - End of life requirements for household appliances containing volatile fluorinated substances or volatile hydrocarbons".

The following dates are fixed:

- latest date by which this document has to (dop) 2013-03-26  
be implemented at national level by  
publication of an identical national standard  
or by endorsement
- latest date by which the national standards (dow) 2015-03-26  
conflicting with this document have to  
be withdrawn

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

## **Introduction**

This document establishes requirements for the transportation, sorting and treatment of household appliances containing volatile fluorocarbons or volatile hydrocarbons after they have been discarded as waste electrical and electronic equipment (WEEE).

The methodologies for the inspection of the performance of treatment systems for household refrigerators and freezers in step 2 treatment was developed in the early 1990s. The methodologies used for performance tests since then have been created to evaluate the efficiency of treatment plants designed to recover VFCs from insulating foam. The evaluation criteria used for performance testing are based on the VFC content of household refrigerators and freezers that were produced in the 1970s and 1980s.

The increasing appearance on the recycling market of appliances with VFC-free insulation (foamed with VHC) has had a strong impact on the general framework conditions for performance testing over the last few years. In the early 1990s the quantity of R11 (a VFC) was reduced by approximately 50 %. R11 was then largely phased out in favour of VHCs in the early 2000s.

Consequently the expected values from step 2 treatment that had been achieved in the 1990s are no longer applicable for the appliances that are recycled today. Nowadays more and more VFC-free appliances and appliances containing reduced quantities of VFC come back for recycling.

The WEEE within the scope of this standard could contain substances that if released untreated to the atmosphere could contribute to ozone depletion or global warming. The substances may be present in the refrigerating system and in insulating foam. This standard seeks to reduce the environmental impact caused by such WEEE by defining requirements covering sorting, transportation, handling and treatment. It covers how substances with a high global warming potential and/or ozone depletion potential are removed from WEEE and subsequently treated so as to significantly reduce environmental impacts.

By addressing the above issues this standard supports the WEEE Directive 2002/96/EC.



## 1 Scope

This European Standard defines requirements for the end of life handling, transportation, storage, sorting and treatment of WEEE household appliances containing volatile fluorocarbons, volatile hydrocarbons, or both. Furthermore, this European Standard only applies to WEEE household appliances that use heat-transfer media other than water e.g. refrigerators, freezers, heat pump tumble dryers, de-humidifiers and portable air conditioners. Discarded appliances covered by this European Standard will have been deposited at a collection facility as domestic WEEE.

The European Standard describes requirements for the removal of volatile fluorocarbons and volatile hydrocarbons. These substances can be found as refrigerant in the refrigerating system (partly dissolved in the oil) and as blowing agent in the insulating foam of discarded household appliances.

NOTE This European Standard has been prepared to fulfil the requirements of Directive 2002/96/EC but does not preclude the procedures described herein from being used to treat appliances that are not commonly found in private households.

It defines requirements pertaining to producers, WEEE compliance schemes (acting on behalf of producers) and waste treatment facilities so as to ensure the provisions of applicable national laws resulting from European legislation are fulfilled. These requirements are intended to define procedures, parameters based on the best available technologies at the time of the publication; however, provisions laid down by national regulatory bodies will continue to additionally apply. This standard only describes the results to be achieved, it does not specify how they are to be achieved nor does it prescribe the use of any specific technology.

This European Standard does not generally cover collection facilities, nor does it cover how appliances arrive at these facilities. However, this standard does address the sorting of heat-pump tumble dryers from other types of tumble dryer, a task that could be performed at a collection facility.

This European Standard defines requirements relating to handling, transportation, sorting and treatment of WEEE covered by the scope of this standard. This standard does not include any activity prior to delivery to a logistic facility.

## 2 Normative references

None

## 3 Abbreviations, terms and definitions

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

### 3.1 Abbreviations

#### 3.1.1

##### **WEEE**

waste electrical and electronic equipment

#### 3.1.2

##### **CFC**

chlorofluorocarbon

#### 3.1.3

##### **HCFC**

hydrochlorofluorocarbon

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