



NSAI
Standards

Irish Standard
I.S. HD 631.4 S1.:2008

Electrical cables - Accessories -
Material characterisation -- Part 4:
Fingerprinting for cold shrinkable
components for low and medium
voltage applications up to 20,8/36 (42)
kV

I.S. HD 631.4 S1.:2008

Incorporating amendments/corrigenda issued since publication:

| | | | |
|--|--|---|-------------------------|
| <i>This standard replaces:</i> | <i>This standard is based on:</i> HD 631.4 S1:2008 | <i>Published:</i> 24 July, 2008 | |
| This Irish Standard was published under the authority of the NSAI and comes into effect on: 22 August, 2008 | | ICS number: 29.035.20 29.060.20 | |
| NSAI 1 Swift Square, Northwood, Santry Dublin 9 | T +353 1 807 3800 F +353 1 807 3838 E standards@nsai.ie W NSAI.ie | Sales: T +353 1 857 6730 F +353 1 857 6729 W standards.ie | Price Code: D |
| Údarás um Chaighdeáin Náisiúnta na hÉireann | | | |

ICS 29.035.20; 29.060.20

English version

**Electrical cables -
Accessories -
Material characterisation -
Part 4: Fingerprinting for cold shrinkable components
for low and medium voltage applications up to 20,8/36 (42) kV**

Câbles électriques -
Accessoires -
Caractérisation des matériaux -
Partie 4: Essais d'identification
des composants rétractables à froid
pour les applications basse
et moyenne tension
jusqu'à 20,8/36 (42) kV

Kabel und isolierte Leitungen -
Garnituren -
Materialcharakterisierung -
Teil 4: Fingerprint-Prüfungen
für kaltschrumpfende Komponenten
für Nieder-
und Mittelspannungsanwendungen
bis 20,8/36 (42) kV

This Harmonization Document was approved by CENELEC on 2008-06-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for implementation of this Harmonization Document at national level.

Up-to-date lists and bibliographical references concerning such national implementations may be obtained on application to the Central Secretariat or to any CENELEC member.

This Harmonization Document exists in three official versions (English, French, German).

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

This Harmonization Document was prepared by a task force under the direction of WG 11 of CENELEC TC 20, Electric cables.

As agreed at the Bruges meeting (June 2007), the text of the draft was submitted to the formal vote and was approved by CENELEC as HD 631.4 S1 on 2008-06-01.

The following dates were fixed:

- latest date by which the existence of the HD has to be announced at national level (doa) 2008-12-01
- latest date by which the HD has to be implemented at national level by publication of a harmonized national standard or by endorsement (dop) 2009-06-01
- latest date by which the national standards conflicting with the HD have to be withdrawn (dow) 2011-06-01

HD 631 will have 4 parts:

Part 1: Fingerprinting and type tests for resinous compounds

Part 2: Fingerprinting and type tests for heat shrinkable components for low voltage applications

Part 3: Fingerprinting for heat shrinkable components for medium voltage applications from 3,6/6 (7,2) kV up to 20,8/36 (42) kV

Part 4: Fingerprinting for cold shrinkable components for low and medium voltage applications up to 20,8/36 (42) kV

Fingerprinting of sealant components which are delivered as non heat shrinkable items, but that have an important interfacing role, is under consideration.

NOTE It has been assumed in the preparation of this document that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

WARNING This Harmonization Document calls for the use of substances and/or procedures that may be injurious to health if adequate precautions are not taken. It refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage.

Contents

| | | |
|-----|---|---|
| 1 | Scope..... | 4 |
| 2 | Normative references | 4 |
| 3 | Terms and definitions | 4 |
| 4 | Fingerprinting | 6 |
| 4.1 | General | 6 |
| 4.2 | Sampling | 6 |
| 4.3 | Preparation and conditioning | 6 |
| 4.4 | Tests | 6 |
| 4.5 | Test report | 6 |
| | Annex A (informative) - Health and safety | 8 |
| | Table 1 - Test methods and requirements | 7 |

1 Scope

This Harmonization Document specifies the test methods and requirements for fingerprinting (as defined in 3.11) of cold shrinkable components intended to be used in cable accessories for low and medium voltage, as defined in EN 50393, HD 629.1 and HD 629.2.

Fingerprinting of materials does not have a mandatory link to type testing of accessories. It shall be regarded as a stand-alone test, but may be carried out in combination with the accessory type tests.

Component basic functions can be: conductive, stress control or stress grading, insulating, oil barrier, anti tracking, external protection and sealing. Components are supplied as single layer items or as multi-layer items.

Components are generally supplied pre-expanded or with a system allowing expansion prior to installation.

NOTE Information on health and safety is given in Annex A.

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 50393 | Test methods and requirements for accessories for use on distribution cables of rated voltage 0,6/1,0 (1,2) kV |
| HD 629.1 | Test requirements on accessories for use on power cables of rated voltage from 3,6/6(7,2) kV up to 20,8/36(42) kV - Part 1: Cables with extruded insulation |
| HD 629.2 | Test requirements on accessories for use on power cables of rated voltage from 3,6/6 (7,2) kV up to 20,8/36 (42) kV - Part 2: Cables with impregnated paper insulation |
| EN ISO 11358 | Plastics - Thermogravimetry (TG) of polymers - General principles (ISO 11358) |
| IEC 60050-461 | International Electrotechnical Vocabulary (IEV) - Chapter 461: Electric cables |
| ISO 2781 | Rubber, vulcanized - Determination of density |

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply together with those given in IEC 60050-461.

3.1

cold shrinkable

property of an elastomeric component previously expanded to recover to its original shape at ambient temperature after removal of the means of support

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-