



**NSAI**  
Standards

Irish Standard  
I.S. EN ISO 6806:2014

## Rubber hoses and hose assemblies for use in oil burners - Specification (ISO 6806:2014)

## I.S. EN ISO 6806:2014

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

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.

*This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):*

*NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.*

*This document is based on:*

EN ISO 6806:2014

*Published:*

2014-09-24

*This document was published under the authority of the NSAI and comes into effect on:*

2014-10-11

ICS number:

27.060.10

83.140.40

NOTE: If blank see CEN/CENELEC cover page

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

Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD

EN ISO 6806

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2014

ICS 83.140.40; 27.060.10

Supersedes EN ISO 6806:1995

English Version

## Rubber hoses and hose assemblies for use in oil burners - Specification (ISO 6806:2014)

Tuyaux et flexibles en caoutchouc pour brûleurs -  
Spécifications (ISO 6806:2014)

Gummischläuche und Schlauchleitungen für den Einsatz in  
Ölbrennern - Anforderung (ISO 6806:2014)

This European Standard was approved by CEN on 7 June 2014.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

**EN ISO 6806:2014 (E)**

<b>Contents</b>	<b>Page</b>
<b>Foreword.....</b>	<b>3</b>

## **Foreword**

This document (EN ISO 6806:2014) has been prepared by Technical Committee ISO/TC 45 "Rubber and rubber products" in collaboration with Technical Committee CEN/TC 218 "Rubber and plastics hoses and hose assemblies" the secretariat of which is held by BSI.

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 March 2015, and conflicting national standards shall be withdrawn at the latest by March 2015.

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

This document supersedes EN ISO 6806:1995.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### **Endorsement notice**

The text of ISO 6806:2014 has been approved by CEN as EN ISO 6806:2014 without any modification.

This page is intentionally left blank

**INTERNATIONAL  
STANDARD**

**ISO  
6806**

Third edition  
2014-09-15

---

---

**Rubber hoses and hose assemblies for  
use in oil burners — Specification**

*Tuyaux et flexibles en caoutchouc pour brûleurs — Spécifications*



Reference number  
ISO 6806:2014(E)

© ISO 2014

**ISO 6806:2014(E)**



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2014

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland



# Contents

Page

<b>Foreword</b> .....	<b>iv</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Construction</b> .....	<b>1</b>
<b>4 Dimensions and tolerances</b> .....	<b>2</b>
4.1 Inside diameter.....	2
4.2 Bend radii.....	2
4.3 Thickness of lining and cover.....	2
<b>5 Physical requirements for lining and cover</b> .....	<b>2</b>
<b>6 Physical requirements for hoses and hose assemblies</b> .....	<b>3</b>
6.1 Hydrostatic tests.....	3
6.2 Oil swell.....	3
6.3 External pressure test.....	3
6.4 Low-temperature flexibility.....	4
6.5 Flammability.....	4
6.6 Ozone resistance (cover only).....	4
6.7 Impulse test.....	4
<b>7 Frequency of testing</b> .....	<b>4</b>
<b>8 Type tests</b> .....	<b>4</b>
<b>9 Marking</b> .....	<b>4</b>
<b>Annex A (normative) Test frequency</b> .....	<b>5</b>
<b>Annex B (informative) Production tests</b> .....	<b>6</b>
<b>Annex C (normative) Determination of oil swell</b> .....	<b>7</b>
<b>Annex D (normative) Determination of resistance to external pressure</b> .....	<b>8</b>
<b>Annex E (normative) Determination of flammability</b> .....	<b>9</b>
<b>Annex F (normative) Pressure impulse test</b> .....	<b>11</b>
<b>Bibliography</b> .....	<b>12</b>

## ISO 6806:2014(E)

### Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 1, *Hoses (rubber and plastics)*.

This third edition cancels and replaces the second edition (ISO 6806:1992), of which it constitutes a minor revision.

The following changes (mainly editorial) were made as required to bring the standard up to date.

- [Clause 2](#) (Normative references) has been updated where necessary. Reference to ISO 4672 has been replaced by ISO 10619-2 and the new titles of ISO 1307, ISO 1436 and ISO 4671 have been quoted.
- Wherever necessary the terminology has been amended to conform to ISO 8330.
- New [Clause 7](#) (Frequency of testing) and [Clause 8](#) (Type tests) have been introduced; new [Annexes A](#) and [B](#) ([Tables A.1](#) and [B.1](#)) have been introduced to standardize the frequency of the tests already required in the previous edition (ISO 6806:1992).
- [Clause 9](#) (Marking) has been amended (maximum working pressure and date of publication of this International Standard to be marked on hose).
- No technical changes from requirements already specified in the second edition (ISO 6806:1992) have been made.

# Rubber hoses and hose assemblies for use in oil burners — Specification

## 1 Scope

This International Standard specifies the minimum requirements for rubber hoses and hose assemblies for use in oil burners.

The following two types of hose assembly are specified.

- Type 1: Hose assemblies for flux and reflux, but not for insertion between the oil burner pump and the atomizing connection; maximum working pressure 1,0 MPa (10 bar); maximum oil temperature 100 °C.
- Type 2: Hose assemblies for insertion between the oil burner pump and the atomizing connection; working pressure 4,0 MPa (40 bar); maximum oil temperature 100 °C.

NOTE The hose assemblies specified in this International Standard are not intended to be used, without special assessment, for purposes other than oil burner installations.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 37, *Rubber, vulcanized or thermoplastic — Determination of tensile stress-strain properties*

ISO 48, *Rubber, vulcanized or thermoplastic — Determination of hardness (hardness between 10 IRHD and 100 IRHD)*

ISO 188, *Rubber, vulcanized or thermoplastic — Accelerated ageing and heat resistance tests*

ISO 1307, *Rubber and plastics hoses — Hose sizes, minimum and maximum inside diameters, and tolerances on cut-to-length hoses*

ISO 1402, *Rubber and plastics hoses and hose assemblies — Hydrostatic testing*

ISO 1436, *Rubber hoses and hose assemblies — Wire-braid-reinforced hydraulic types for oil-based or water-based fluids — Specification*

ISO 1817, *Rubber, vulcanized or thermoplastic — Determination of the effect of liquids*

ISO 4671, *Rubber and plastics hoses and hose assemblies — Methods of measurement of the dimensions of hoses and the lengths of hose assemblies*

ISO 7326, *Rubber and plastics hoses — Assessment of ozone resistance under static conditions*

ISO 10619-2:2011, *Rubber and plastics hoses and tubing — Measurement of flexibility and stiffness — Part 2: Bending tests at sub-ambient temperatures*

## 3 Construction

Hoses in accordance with this International Standard shall consist of either:

- a) an internally smooth rubber lining and an external corrosion-resistant metal braid; or

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](#)
-