



NSAI
Standards

Irish Standard
I.S. EN ISO 6808:2014

Plastics hoses and hose assemblies for suction and low-pressure discharge of petroleum liquids - Specification (ISO 6808:2014)

I.S. EN ISO 6808:2014

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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

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Plastics hoses and hose assemblies for suction and low-pressure discharge of petroleum liquids - Specification (ISO 6808:2014)

Tuyaux et flexibles en plastique pour aspiration et
refoulement basse pression des liquides pétroliers -
Spécifications (ISO 6808:2014)

Kunststoffschläuche und Schlauchleitungen für das
Ansaugen und Fördern von Flüssigkeiten aus Erdöl bei
niedrigem Druck - Spezifikation (ISO 6808:2014)

This European Standard was approved by CEN on 28 May 2014.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

EN ISO 6808:2014 (E)

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Foreword

This document (EN ISO 6808:2014) 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of an identical text or by endorsement, at the latest by January 2015, and conflicting national standards shall be withdrawn at the latest by January 2015.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 6808:2000.

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Endorsement notice

The text of ISO 6808:2014 has been approved by CEN as EN ISO 6808:2014 without any modification.

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INTERNATIONAL STANDARD

**ISO
6808**

Third edition
2014-07-01

Plastics hoses and hose assemblies for suction and low-pressure discharge of petroleum liquids — Specification

*Tuyaux et flexibles en plastique pour aspiration et refoulement basse
pression des liquides pétroliers — Spécifications*



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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
Web www.iso.org

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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).

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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, *Rubber and plastics hoses and hose assemblies*.

This third edition cancels and replaces the second edition (ISO 6808:1999), which has been technically revised with the following changes:

- Throughout the document: Nominal bore was changed to hose size.
- Throughout the document: ISO 1817 Oil No. 3 was changed to IRM 903 oil.
- ISO 471, ISO 1746, and ISO 4672 were replaced by ISO 23529, ISO 10619-1, and ISO 10619-2, respectively.
- Terms and definitions clause was added.
- Type 1 and Type 2 maximum working pressures at 45 °C were corrected.
- Hose construction for electrical bonding was updated.
- [Tables 4](#) and [5](#): Note b was added.
- [7.2](#) and [Table 5](#): Changed 55 °C to 45 °C.
- [9.3](#): Electrical bonding was redefined.
- [9.4](#): Added electrical wall resistance clause.
- Added frequency of testing clause.
- Added type tests clause.
- Added [Annex A](#) — Test frequency.
- Added [Annex B](#) — Production tests.

Introduction

This International Standard has been prepared to provide minimum acceptable requirements for the satisfactory performance of polymer-reinforced thermoplastics hoses for suction and discharge applications, conveying kerosene, heating oil, diesel fuel, and lubricating oils. These hoses are neither suitable for conveying automotive or aviation fuel nor suitable for metered delivery of any liquid.

The list of hose sizes given in [Tables 1](#) and [2](#) is not intended to be restrictive and will not preclude the manufacture of sizes outside the preferred-number range (the basis of the tables) and which might be the subject of individual national standards.

Plastics hoses and hose assemblies for suction and low-pressure discharge of petroleum liquids — Specification

WARNING — Persons using this International Standard should be familiar with normal laboratory practice. This International Standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

1 Scope

This International Standard specifies the requirements for two types of polymer-reinforced thermoplastics hose and hose assembly for suction and discharge applications with kerosene, heating oil, diesel fuel, and lubricating oils in the temperature range $-10\text{ }^{\circ}\text{C}$ to $+45\text{ }^{\circ}\text{C}$.

NOTE The hoses can be stored in a static condition at $-30\text{ }^{\circ}\text{C}$ to $+65\text{ }^{\circ}\text{C}$ without damage by climatic conditions.

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 176:2005, *Plastics — Determination of loss of plasticizers — Activated carbon method*

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

ISO 527-3, *Plastics — Determination of tensile properties — Part 3: Test conditions for films and sheets*

ISO 868, *Plastics and ebonite — Determination of indentation hardness by means of a durometer (Shore hardness)*

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

ISO 7233, *Rubber and plastics hoses and hose assemblies — Determination of resistance to vacuum*

ISO 7751, *Rubber and plastics hoses and hose assemblies — Ratios of proof and burst pressure to maximum working pressure*

ISO 8031, *Rubber and plastics hoses and hose assemblies — Determination of electrical resistance and conductivity*

ISO 8330, *Rubber and plastics hoses and hose assemblies — Vocabulary*

ISO 10619-1, *Rubber and plastics hoses and tubing — Measurement of flexibility and stiffness — Part 1: Bending tests at ambient temperature*

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

ISO 23529, *Rubber — General procedures for preparing and conditioning test pieces for physical test methods*

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