



# SLOVENSKI STANDARD SIST EN ISO 5771:2009

01-januar-2009

BUXca Yý U  
SIST EN ISO 5771:2000

---

; i a YbY'Wj j'hyf'Wj b]df]\_`1 \_]nUdfYbcg`VfYnj cXbY[ ULa cb]U\_U!'GdYWZ\_ UYU  
fIGC') ++%&\$\$, Ł

Rubber hoses and hose assemblies for transferring anhydrous ammonia - Specification  
(ISO 5771:2008)

Gummischläuche und Schlauchleitungen für den Transport von wasserfreiem Ammoniak  
- Anforderungen (ISO 5771:2008)

Tuyaux et flexibles en caoutchouc pour le transfert d'ammoniac anhydre - Spécifications  
(ISO 5771:2008)

<https://standards.iteh.ai/catalog/standards/sist/dc88cfef-4f7e-4d25-82d7-081e1caff4a1/sist-en-iso-5771-2009>

Ta slovenski standard je istoveten z: EN ISO 5771:2008

---

**ICS:**

23.040.70 Gumene cevi in armature Hoses and hose assemblies

**SIST EN ISO 5771:2009**

**en,fr,de**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 5771:2009](#)

<https://standards.iteh.ai/catalog/standards/sist/dc88cfef-4f7e-4d25-82d7-081e1caff4a1/sist-en-iso-5771-2009>

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 5771**

September 2008

ICS 71.120.99; 83.140.40

Supersedes EN ISO 5771:1996

English Version

## Rubber hoses and hose assemblies for transferring anhydrous ammonia - Specification (ISO 5771:2008)

Tuyaux et flexibles en caoutchouc pour le transfert d'ammoniac anhydre - Spécifications (ISO 5771:2008)

Gummischläuche und -schlauchleitungen für den Transport von wasserfreiem Ammoniak - Anforderungen (ISO 5771:2008)

This European Standard was approved by CEN on 30 August 2008.

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 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 Management Centre has the same status as the official versions.

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

[SIST EN ISO 5771:2009](https://standards.iteh.ai/catalog/standards/sist/dc88cfef-4f7e-4d25-82d7-081e1caff4a1/sist-en-iso-5771-2009)

<https://standards.iteh.ai/catalog/standards/sist/dc88cfef-4f7e-4d25-82d7-081e1caff4a1/sist-en-iso-5771-2009>



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

**Contents**

Page

Foreword.....3

**iTeh STANDARD PREVIEW  
(standards.iteh.ai)**

[SIST EN ISO 5771:2009](https://standards.iteh.ai/catalog/standards/sist/dc88cfef-4f7e-4d25-82d7-081e1caff4a1/sist-en-iso-5771-2009)

<https://standards.iteh.ai/catalog/standards/sist/dc88cfef-4f7e-4d25-82d7-081e1caff4a1/sist-en-iso-5771-2009>

## Foreword

This document (EN ISO 5771:2008) 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 2009, and conflicting national standards shall be withdrawn at the latest by March 2009.

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 5771:1996.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**  
**Endorsement notice**

The text of ISO 5771:2008 has been approved by CEN as a EN ISO 5771:2008 without any modification.

[SIST EN ISO 5771:2009](https://standards.iteh.ai/catalog/standards/sist/dc88cfef-4f7e-4d25-82d7-081e1caff4a1/sist-en-iso-5771-2009)

<https://standards.iteh.ai/catalog/standards/sist/dc88cfef-4f7e-4d25-82d7-081e1caff4a1/sist-en-iso-5771-2009>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 5771:2009](#)

<https://standards.iteh.ai/catalog/standards/sist/dc88cfef-4f7e-4d25-82d7-081e1caff4a1/sist-en-iso-5771-2009>

# INTERNATIONAL STANDARD

**ISO**  
**5771**

Third edition  
2008-09-15

---

---

## Rubber hoses and hose assemblies for transferring anhydrous ammonia — Specification

*Tuyaux et flexibles en caoutchouc pour le transfert d'ammoniac  
anhydre — Spécifications*

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 5771:2009](https://standards.iteh.ai/catalog/standards/sist/dc88cfef-4f7e-4d25-82d7-081e1caff4a1/sist-en-iso-5771-2009)

<https://standards.iteh.ai/catalog/standards/sist/dc88cfef-4f7e-4d25-82d7-081e1caff4a1/sist-en-iso-5771-2009>



Reference number  
ISO 5771:2008(E)

© ISO 2008

## ISO 5771:2008(E)

**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 5771:2009](https://standards.iteh.ai/catalog/standards/sist/dc88cfef-4f7e-4d25-82d7-081e1caff4a1/sist-en-iso-5771-2009)

<https://standards.iteh.ai/catalog/standards/sist/dc88cfef-4f7e-4d25-82d7-081e1caff4a1/sist-en-iso-5771-2009>

**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2008

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing 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

Foreword.....	iv
<b>1 Scope .....</b>	<b>1</b>
<b>2 Normative references .....</b>	<b>1</b>
<b>3 Terms and definitions .....</b>	<b>2</b>
<b>4 Pressure rating.....</b>	<b>2</b>
<b>5 Materials and construction .....</b>	<b>2</b>
5.1 Lining .....	2
5.2 Reinforcement.....	2
5.3 Cover.....	2
5.4 Hose assemblies.....	2
<b>6 Dimensions.....</b>	<b>3</b>
6.1 Inside diameters and tolerances.....	3
6.2 Outside diameter.....	3
6.3 Concentricity.....	3
6.4 Tolerances on length.....	3
<b>7 Physical properties.....</b>	<b>3</b>
7.1 Rubber compounds.....	3
7.2 Finished hose.....	4
7.3 Ammonia resistance tests .....	5
<b>8 Hose assembly delivery test and annual in-use test requirements .....</b>	<b>8</b>
<b>9 Frequency of testing .....</b>	<b>9</b>
<b>10 Marking .....</b>	<b>9</b>
<b>11 Packaging and storage .....</b>	<b>9</b>
<b>12 Test certificate.....</b>	<b>9</b>
<b>Annex A (normative) Type and routine testing of production hoses and hose assemblies.....</b>	<b>10</b>
<b>Annex B (informative) Periodic (quality control) testing of production hoses.....</b>	<b>11</b>
<b>Annex C (informative) Recommendations for the lengths of hoses supplied in bulk and for tolerances on the lengths of hose assemblies.....</b>	<b>12</b>
<b>Bibliography .....</b>	<b>13</b>

**ISO 5771:2008(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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 5771 was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 1, *Hoses (rubber and plastics)*.

This third edition cancels and replaces the second edition (ISO 5771:1994), which has been technically revised. The main changes are the addition of a concentricity requirement (see 6.3), increases in the lining and cover adhesion requirements (see Table 4) and more detailed cover pin-pricking requirements (see 5.3). It also incorporates the Technical Corrigendum ISO 5771:1994/Cor.1:1995.

**iTeh STANDARD PREVIEW**  
(standards.iteh.ai)  
<https://standards.iteh.ai/catalog/standards/sist/dc88cfef-4f7e-4d25-82d7-081e1caff4a1/sist-en-iso-5771-2009>

# Rubber hoses and hose assemblies for transferring anhydrous ammonia — Specification

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

**CAUTION** — All personnel working with anhydrous ammonia and its delivery systems should be familiar with and utilize the necessary safety precautions to minimize the potential for personal injury and property damage. Do not use anhydrous-ammonia hose assemblies at temperatures or pressures above those recommended by the hose manufacturer. Never recouple an anhydrous-ammonia hose. Hoses manufactured to this specification are suitable for use with anhydrous ammonia only.

## 1 Scope

This International Standard specifies the minimum requirements for rubber hoses used for transferring ammonia, in liquid or in gaseous form, at ambient temperatures from  $-40\text{ }^{\circ}\text{C}$  up to and including  $+55\text{ }^{\circ}\text{C}$ . It does not include specifications for end fittings, but is limited to the performance of the hoses and hose assemblies.

## 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.

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

ISO 188:2007, *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 4671, *Rubber and plastics hoses and hose assemblies — Methods of measurement of the dimensions of hoses and the lengths of hose assemblies*

ISO 4672:1997, *Rubber and plastics hoses — Sub-ambient temperature flexibility tests*

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

ISO 8033, *Rubber and plastics hoses — Determination of adhesion between components*

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