



# SLOVENSKI STANDARD SIST EN ISO 8031:2010

01-februar-2010

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Rubber and plastics hoses and hose assemblies - Determination of electrical resistance and conductivity (ISO 8031:2009)

Gummi- und Kunststoffschläuche und Schlauchleitungen - Bestimmung der elektrischen Eigenschaften, des Widerstands und der Leitfähigkeit (ISO 8031:2009)

Tuyaux et flexibles en caoutchouc et en plastique - Détermination de la résistance et de la conductivité électriques (ISO 8031:2009)

Ta slovenski standard je istoveten z: EN ISO 8031:2009

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**ICS:**

23.040.70 Gumene cevi in armature Hoses and hose assemblies

**SIST EN ISO 8031:2010 en,fr,de**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 8031**

October 2009

ICS 23.040.70

Supersedes EN ISO 8031:1997

English Version

## Rubber and plastics hoses and hose assemblies - Determination of electrical resistance and conductivity (ISO 8031:2009)

Tuyaux et flexibles en caoutchouc et en plastique -  
Détermination de la résistance et de la conductivité  
électriques (ISO 8031:2009)

Gummi- und Kunststoffschläuche und Schlauchleitungen -  
Bestimmung der elektrischen Eigenschaften, des  
Widerstands und der Leitfähigkeit (ISO 8031:2009)

This European Standard was approved by CEN on 10 October 2009.

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.

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## Foreword

This document (EN ISO 8031:2009) 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 April 2010, and conflicting national standards shall be withdrawn at the latest by April 2010.

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 8031:1997.

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.

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Endorsement notice

The text of ISO 8031:2009 has been approved by CEN as a EN ISO 8031:2009 without any modification.

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# INTERNATIONAL STANDARD

**ISO  
8031**

Third edition  
2009-10-15

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## Rubber and plastics hoses and hose assemblies — Determination of electrical resistance and conductivity

*Tuyaux et flexibles en caoutchouc et en plastique — Détermination de  
la résistance et de la conductivité électriques*

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## ISO 8031:2009(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 8031 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 8031:1993), which has been technically revised (for details, see the Introduction).

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## Introduction

This edition of ISO 8031 addresses the problems encountered in field testing and during product acceptance tests in a production facility in following the test procedures specified in the previous edition (ISO 8031:1993) and a more practical approach is suggested. Also, a test procedure for determining electrical continuity between the end fittings of a hose assembly without actually measuring the resistance has been introduced. This test is frequently carried out in the field and in the factory when the product standard does not require the exact electrical resistance to be measured, but only requires verification of electric conductivity between both metal end fittings.

Special test methods to determine the electrical resistance through the hose wall (now required in some product standards for hoses used in explosive atmospheres) have been added.

Some test methods which have been standard practice in the hose industry for some time have now been included, as have several new methods to determine the ability of a hose assembly (with metal end fittings) to dissipate static electric charges when the metal end fitting is connected to earth. A total of four new explanatory sketches are included. The hose and hose assembly product standard applicable will have to specify which method is most suitable for the purpose of verification of the required property.

Annex A, an amended version of informative Annex A, "Recommended terminology and limits for electrical resistance", in ISO 8330:2007, has been included.

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