
**Rubber and plastics hoses and hose
assemblies — Guidelines for selection,
storage, use and maintenance**

*Tuyaux et flexibles en caoutchouc et en plastique — Lignes directrices
pour la sélection, le stockage, l'utilisation et la maintenance*

Sample Document

get full document from standards.iteh.ai



Sample Document

get full document from standards.iteh.ai



COPYRIGHT PROTECTED DOCUMENT

© ISO 2016, Published in Switzerland

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
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

	Page
Foreword	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 General recommendations	1
4.1 Selection criteria	1
4.2 Storage conditions	2
4.2.1 General	2
4.2.2 Storage period	2
4.2.3 Temperature	3
4.2.4 Humidity	3
4.2.5 Light	3
4.2.6 Ozone	3
4.2.7 Environment	3
4.2.8 Sources of heat	3
4.2.9 Electric and magnetic fields	3
4.2.10 Method of storing	3
4.2.11 Rodents	3
4.2.12 Issue from storage	4
4.2.13 Return to storage	4
4.3 Use and maintenance	4
4.3.1 Handling	4
4.3.2 Pressure	4
4.3.3 Temperature	4
4.3.4 Products conveyed	4
4.3.5 Environment	4
4.3.6 Bending radii	4
4.3.7 Torsional stress	4
4.3.8 Tensile stress	5
4.3.9 Vibration	5
4.3.10 Assembly of end fittings	5
4.3.11 Leakage	5
4.3.12 Electrical properties	5
4.3.13 Fixed installations	5
4.3.14 Moving parts	5
4.3.15 Marking/identification	5
4.3.16 Maintenance	6
4.3.17 Repairing of hoses	6
5 Additional recommendations for specific applications	6
5.1 General	6
5.2 Welding and gas-cutting hoses	6
5.3 Steam hoses	6
5.4 Hoses for the conveyance of foodstuffs and drinking water	7
5.5 Hoses for the conveyance of abrasive products	7
5.6 Hoses for the conveyance of corrosive or aggressive products	7
5.7 Hoses for the conveyance of flammable products	7
5.8 Automotive hoses	8
5.9 Fire-fighting hoses	8
5.9.1 General	8
5.9.2 Special points to be observed	9
5.10 Oil-industry hoses and hose assemblies	10
5.10.1 General	10
5.10.2 Special points to be observed	10

Sample Document

get full document from standards.iteh.ai

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).

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).

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 World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

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 fourth edition cancels and replaces the third edition (ISO 8331:2014), which has been technically revised with the following change:

- 4.9 has been deleted.

Sample Document

get full document from standards.iteh.ai

Rubber and plastics hoses and hose assemblies — Guidelines for selection, storage, use and maintenance

1 Scope

This document sets out recommendations designed to maintain rubber and plastics hoses and hose assemblies, prior to use, in a condition as close as possible to the condition they were in when they were received and to obtain the expected service life.

NOTE It is intended that this document be used in conjunction with any applicable national statutory regulations.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1402, *Rubber and plastics hoses and hose assemblies — Hydrostatic testing*

ISO 2230, *Rubber products — Guidelines for storage*

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 8330 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

4 General recommendations

4.1 Selection criteria

It is in the best interests of the user to select hoses or hose assemblies complying with national or international standards whenever such standards exist for the intended application. For applications outside the scope of such standards, needing special requirements or for which the necessary information is not available, the hose manufacturer or trade association should be consulted.

The following points should be taken into consideration when selecting a hose or hose assembly for a specific application:

- a) Operational environment:
 - ambient temperature;
 - atmospheric conditions;
 - contact with chemically aggressive liquids;