BS ISO 2929:2021



BSI Standards Publication

Rubber hoses and hose assemblies for bulk fuel delivery by truck — Specification



National foreword

This British Standard is the UK implementation of ISO 2929:2021. It supersedes BS ISO 2929:2014, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PRI/66, Rubber and plastics tubing, hoses and hose assemblies.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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ISBN 978 0 539 15477 1

ICS 75.200; 83.140.40

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 September 2021.

Amendments/corrigenda issued since publication

Date Text affected

INTERNATIONAL STANDARD

BS ISO 2929:2021 ISO 2929

Fifth edition 2021-09-17

Rubber hoses and hose assemblies for bulk fuel delivery by truck — Specification

Tuyaux en caoutchouc et assemblages de tuyaux pour livraison en vrac d'hydrocarbures liquides par camions-citernes — Spécifications



Reference number ISO 2929:2021(E)



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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).

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).

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For an explanation of the voluntary nature of standards, 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 <u>www.iso.</u> <u>org/iso/foreword.html</u>.

This document was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 1, *Rubber and plastics hoses and hose assemblies*.

This fifth edition cancels and replaces the fourth edition (ISO 2929:2014), which has been technically revised.

The main changes compared to the previous edition are as follows:

- normative references (<u>Clause 2</u>) updated;
- editorial changes to <u>Clause 9</u> and <u>Clause 10</u>;
- pressure units changed to MPa (bar).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <u>www.iso.org/members.html</u>.

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WARNING — Persons using this document should be familiar with normal laboratory practice. This document 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 determine the applicability of any other restrictions.

1 Scope

This document specifies the requirements for two groups of rubber hoses and rubber hose assemblies for loading and discharge of liquid hydrocarbon fuels with a maximum working pressure of 1,0 MPa (10 bar).

Both groups of hoses are designed for

- a) use with hydrocarbon fuels having an aromatic-hydrocarbon content not exceeding 50 % by volume and containing up to 15 % of oxygenated compounds, and
- b) operation within the temperature range of -30 °C to +70 °C, undamaged by climatic conditions of -50 °C to +70 °C when stored in static conditions.

NOTE Hoses for use at temperatures lower than -30 °C can be the subject of discussion between manufacturer and end user.

This document is not applicable to hoses and hose assemblies for LPG systems, aviation fuel systems, fuel station systems or marine applications.

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

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

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

ISO 1817:2015, Rubber, vulcanized or thermoplastic — Determination of the effect of liquids

ISO 4649:2017, Rubber, vulcanized or thermoplastic — Determination of abrasion resistance using a rotating cylindrical drum device

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

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

ISO 7326:2016, Rubber and plastics hoses — Assessment of ozone resistance under static conditions

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

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