International Standard

ISO 17717

Meteorological balloons — Specification

Ballons météorologiques — Spécifications

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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 document 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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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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products,* Subcommittee SC4*, Products (other than hoses)*.

This second edition cancels and replaces the first edition (ISO 17717:2017), which has been technically revised.

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

— in Table 3, the size 10 and its specified values have been added;

— in Table 6, the sizes 10 to 100 and their specified values have been added;

— in Table B.2, the sizes of 10 to 100 and their specified values have been added;

— in Table 8 and C.3.2, the mass range has been changed to size range;

— in A.2.4 and B.3.1, thin cotton gloves without coating on palm for precision work have been added;

— in E.3, the statement has been changed to "the number of samples shall be in accordance with Table 8".

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 www.iso.org/members.html.

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Meteorological balloons — Specification

Warning — Persons using this document should be familiar with 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 minimum requirements and the test methods for meteorological balloons made from natural rubber latex or natural rubber latex compounded with synthetic rubber emulsion.

This document applies to two types of balloons:

— Type 1: meteorological balloon by dipping process;

— Type 2: meteorological balloon by moulding process.

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 2859-1, *Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
air bubble
thin portion with definite edge, concave or convex, which is created by air in the balloon film

3.2
body thickness
single-walled thickness of a meteorological balloon

3.3
cracking
localized cracks in the balloon film

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