# INTERNATIONAL STANDARD

ISO 11833-1

Fourth edition 2019-07

## Plastics — Unplasticized poly(vinyl chloride) sheets —

Part 1:

Types, dimensions and characteristics for sheets of thickness not less than 1 mm

Plastiques — Feuilles en poly(chlorure de vinyle) non plastifié — Partie 1: Types, dimensions et caractéristiques pour des plaques d'épaisseur non inférieure à 1 mm



### ISO 11833-1:2019(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 <a href="www.iso.org/directives">www.iso.org/directives</a>).

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 <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

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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 <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 11, *Products*.

This fourth edition cancels and replaces the third edition (ISO 11833-1:2012), which has been technically revised. The main changes compared to the previous edition are as follows:

- the title has been editorially revised to read "Plastics Unplasticized poly(vinyl chloride) sheets —
   Part 1: Types, dimensions and characteristics for sheets of thickness not less than 1 mm";
- the "colour" requirements (former 5.3) have been incorporated with the "appearance" requirements in <u>6.2</u> (former 5.2);
- the requirements for measurement at any other temperature (t °C) than 23 °Chas been added to 7.3.1 (former 6.3.1);
- the method of handling the results of 7.4.1, 7.4.2 and 7.4.3 (former 6.4.1 to 6.4.3) have been added;
- "Testing of sheets with a thickness between 1,0 mm and <1,5 mm shall be subject between the interested parties" has been added in 7.5.1 (former 6.5.1);
- a new <u>Table 7</u> "Frequency and measurement positions of appearance tests and dimensional measurements" has been added and the subsequent tables have been renumbered..

A list of all parts in the ISO 11833 series can be found on the ISO website.

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 <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

## Plastics — Unplasticized poly(vinyl chloride) sheets —

## Part 1:

## Types, dimensions and characteristics for sheets of thickness not less than 1 mm

## 1 Scope

This document specifies the requirements for flat extruded sheets and pressed sheets of unplasticized poly(vinyl chloride) (PVC-U) and the test methods to be used to measure the required values.

It applies only to sheets of thickness not less than 1,0 mm.

It does not cover biaxially stretched PVC-U sheets.

#### 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 75-2:2013, Plastics — Determination of temperature of deflection under load — Part 2: Plastics and ebonite

ISO 178, Plastics — Determination of flexural properties

ISO 179-1, Plastics — Determination of Charpy impact properties — Part 1: Non-instrumented impact test

ISO 291, Plastics — Standard atmospheres for conditioning and testing

ISO 306:2013, Plastics — Thermoplastic materials — Determination of Vicat softening temperature (VST)

ISO 472, Plastics — Vocabulary

ISO 527-2, Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics

ISO 899-2, Plastics — Determination of creep behaviour — Part 2: Flexural creep by three-point loading

ISO 21306-1:2019, Plastics — Unplasticized poly(vinyl chloride) (PVC-U) moulding and extrusion materials — Part 1: Designation system and basis for specifications

ISO 1183-1, Plastics — Methods for determining the density of non-cellular plastics — Part 1: Immersion method, liquid pycnometer method and titration method

ISO 1183-2, Plastics — Methods for determining the density of non-cellular plastics — Part 2: Density gradient column method

ISO 2039-1, Plastics — Determination of hardness — Part 1: Ball indentation method

ISO 2818, Plastics — Preparation of test specimens by machining

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