ICS 83.080.20 SLOVENSKÁ TECHNICKÁ NORMA Január 2020

STN	**Plasty** **Materiály z 1-polybuténu (PB-1) na tvárnenie a vytláčanie** **Časť 1: Systém označovania a základy na špecifikáciu (ISO 21302-1: 2019)**	**STN** **EN ISO 21302-1** 64 2500

Plastics - Polybutene-1 (PB-1) moulding and extrusion materials - Part 1: Designation system and basis for specifications (ISO 21302-1:2019)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/19

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Oznámením tejto normy sa ruší
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EUROPEAN STANDARD

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EN ISO 21302-1

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ICS 83.080.20 Supersedes EN ISO 8986-1:2009

English Version

Plastics - Polybutene-1 (PB-1) moulding and extrusion materials - Part 1: Designation system and basis for specifications (ISO 21302-1:2019)

Plastiques - Matériaux à base de polybutène-1 (PB-1) pour moulage et extrusion - Partie 1: Système de désignation et base de spécification (ISO 21302-1:2019)

Kunststoffe - Polybuten-1 (PB-1)-Werkstoffe - Teil 1: Bezeichnungssystem und Basis für Spezifikationen (ISO 21302-1:2019)

This European Standard was approved by CEN on 12 May 2019.

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COMITÉ EUROPÉEN DE NORMALISATION
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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN ISO 21302-1:2019) has been prepared by Technical Committee ISO/TC 61 "Plastics" in collaboration with Technical Committee CEN/TC 249 “Plastics” the secretariat of which is held by NBN.

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of an identical text or by endorsement, at the latest by December 2019, and conflicting national standards shall be withdrawn at the latest by December 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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Endorsement notice

The text of ISO 21302-1:2019 has been approved by CEN as EN ISO 21302-1:2019 without any modification.

INTERNATIONAL STANDARD

ISO 21302-1

First edition
2019-05

Plastics — Polybutene-1 (PB-1) moulding and extrusion materials —

Part 1: Designation system and basis for specifications

Plastiques — Matériaux à base de polybutène-1 (PB-1) pour moulage et extrusion —

Partie 1: Système de désignation et base de spécifications

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

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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).

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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 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 9, *Thermoplastic materials*.

This first edition of ISO 21302-1 cancels and replaces ISO 8986-1:2009, which has been technically revised to introduce a new designation system. The main changes compared to the previous edition are as follows:

— the order of the designation block number in designation and specification system has been changed;

— the code-letters used in data block 3 in positions 2 to 8 have been added, and the elevated heat performance is expressed in J;

— 190 °C/21,0 kg has been added to the sets of conditions which can be used for the measurement of the melt volume-flow rate (MVR); the test conditions for the MVR are specified: the test condition D (190 °C/2,16 kg), the test condition T (190 °C /5,0 kg), the test condition F (190 °C /10,0 kg) and the test condition G (190 °C /21,6 kg);

— the content of non-olefinic monomers with functional groups up to a maximum of 1 % by mass in polybutene-1 has been increased to 3 %;

— the MVR filing range and its corresponding code have been added.

A list of all parts in the ISO 21302 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 www.iso.org/members.html.

INTERNATIONAL STANDARD **ISO 21302-1:2019(E)**

Plastics — Polybutene-1 (PB-1) moulding and extrusion materials —

Part 1: Designation system and basis for specifications

1 Scope

This document establishes a system of designation for polybutene-1 (PB-1) thermoplastic materials which can be used as the basis for specifications. For the sake of simplicity, the designation polybutene-1 and the abbreviation PB are used in this document.

The types of polybutene plastics are differentiated from each other by a classification system based on appropriate levels of the designatory property melt volume-flow rate and on information about basic polymer parameters, intended application and/or method of processing, important properties, additives, colorants, fillers and reinforcing materials.

This document is applicable to all butene-1 homopolymers and to copolymers of butene-1 with a maximum content of other 1-olefinic monomers of less than 50 g/kg (mass fraction) and with a content of non-olefinic monomers with functional groups up to a maximum of 3 g/kg (mass fraction).

It applies to materials ready for normal use in the form of powder, granules or pellets, unmodified or modified by colorants, additives, fillers, etc.

It is not intended to imply that materials having the same designation give necessarily the same performance. This document does not provide engineering data, performance data or data on processing conditions which can be required to specify a material for a particular application and/or method of processing. If such additional properties are required, they are intended to be determined in accordance with the test methods specified in ISO 21302-2, if suitable.

In order to specify a thermoplastic material for a particular application or to ensure reproducible processing, additional requirements are given in data block 5 (see 4.1).

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 1043-1, *Plastics — Symbols and abbreviated terms — Part 1: Basic polymers and their special characteristics*

ISO 21302-2, *Plastics — Polybutene-1 (PB-1) moulding and extrusion materials — Part 2: Preparation of test specimens and determination of properties*

