

<b>STN</b>	<b>Plasty</b> <b>Materiály z etylén-vinylalkoholového (EVOH)</b> <b>kopolyméru na tvárnenie a vytlačanie</b> <b>Časť 1: Systém označovania a základy na</b> <b>špecifikáciu (ISO 21309-1: 2019)</b>	<b>STN</b> <b>EN ISO 21309-1</b>  64 3320
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Plastics - Ethylene/vinyl alcohol (EVOH) copolymer moulding and extrusion materials - Part 1: Designation system and basis for specifications (ISO 21309-1:2019)

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. 08/19

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English Version

**Plastics - Ethylene/vinyl alcohol (EVOH) copolymer  
moulding and extrusion materials - Part 1: Designation  
system and basis for specifications (ISO 21309-1:2019)**

Plastiques - Matériaux à base de copolymères  
éthylène/alcool vinylique (EVOH) pour moulage et  
extrusion - Partie 1: Système de désignation et base de  
spécification (ISO 21309-1:2019)

Kunststoffe - Ethylen-Vinylalkohol (EVOH)-Copolymer-  
Werkstoffe - Teil 1: Bezeichnungssystem und Basis für  
Spezifikationen (ISO 21309-1:2019)

This European Standard was approved by CEN on 8 February 2019.

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**EN ISO 21309-1:2019 (E)**

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## **European foreword**

This document (EN ISO 21309-1:2019) 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of an identical text or by endorsement, at the latest by September 2019, and conflicting national standards shall be withdrawn at the latest by September 2019.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.

This document supersedes EN ISO 14663-1:2006.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## **Endorsement notice**

The text of ISO 21309-1:2019 has been approved by CEN as EN ISO 21309-1:2019 without any modification.

**INTERNATIONAL  
STANDARD**

**ISO  
21309-1**

First edition  
2019-02

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**Plastics — Ethylene/vinyl alcohol  
(EVOH) copolymer moulding and  
extrusion materials —**

**Part 1:  
Designation system and basis for  
specifications**

*Plastiques — Matériaux à base de copolymères éthylène/alcool  
vinylique (EVOH) pour moulage et extrusion —*

*Partie 1: Système de désignation et base de spécification*



Reference number  
ISO 21309-1:2019(E)

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## ISO 21309-1:2019(E)

### 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](http://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](http://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 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](http://www.iso.org/iso/foreword.html).

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

This first edition of ISO 21309-1 cancels and replaces ISO 14663-1:1999, which has been technically revised to introduce a new designation system. The main changes are as follows:

- a new designation system has been introduced;
- the number of the standard has been changed;
- the code numbers used for melt mass-flow rate have been revised.

A list of all parts in the ISO 21309 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](http://www.iso.org/members.html).



# Plastics — Ethylene/vinyl alcohol (EVOH) copolymer moulding and extrusion materials —

## Part 1: Designation system and basis for specifications

### 1 Scope

This document establishes a system of designation for ethylene/vinyl alcohol (EVOH) copolymer thermoplastic materials, which may be used as the basis for specifications.

The types of ethylene/vinyl alcohol (EVOH) copolymer plastic are differentiated from each other by a classification system based on appropriate levels of the designatory property:

- melt mass-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 copolymers of ethylene and vinyl alcohol containing from 15 mol % to 60 mol % of ethylene. 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 described ISO 21309-2, if suitable.

In order to specify a thermoplastic material for a particular application or to ensure reproducible processing, additional requirements can be given in data block 4 and 5 (see [Clause 4](#), introductory paragraph).

### 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 1133-1, *Plastics — Determination of the melt mass-flow rate (MFR) and melt volume-flow rate (MVR) of thermoplastics — Part 1: Standard method*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**