



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 41877.1-2022

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

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Foreword

This document was drafted in accordance with the provisions of GB/T 1.1-2020

Directives for standardization - Part 1: Rules for the structure and drafting of standardizing documents.

This document is Part 1 of GB/T 41877 Plastics - Ethylene-vinyl alcohol (EVOH) copolymer moulding and extrusion materials. GB/T 41877 has issued the following parts:

- Part 1: Designation system and basis for specifications;
- Part 2: Preparation of test specimens and determination of properties.

This document was modified in relation to ISO 21309-1:2019 Plastic ethylene-vinyl alcohol (EVOH) copolymer moulding and extrusion materials - Part 1: Nomenclature system and classification basis.

The technical differences between this document and ISO 21309-1:2019 and their reasons are as follows:

- ISO 1043-1 is replaced by the normative reference GB/T 1844.1 (see 4.1) to adapt to the technical conditions of China and promote operability;
- ISO 21309-2:2019 is replaced by the normative reference GB/T 41877.2 (see 4.2) to adapt to the technical conditions of China and promote operability;
- ISO 1133-1 is replaced by the normative reference GB/T 3682.1 (see 4.5) to

adapt to the technical conditions of China and promote operability;

-- For data block 4, the test condition M (see 4.5) is added to make the standard more complete;

-- For examples of designations, the quoted standard number in examples is changed from "ISO 21309" to "GB/T 41877.1", it is consistent with the designation system of other national standards for plastic resins (see Chapter 5).

The following editorial changes have been made to this document:

-- The ethylene content represented by the number code 32 in data block 1 is amended from ">30~34" to ">31~34" (see 4.2);

-- "Data block 2" in Table 2 "Letter codes used in data block 2" is amended to "data block 3" (see 4.4); "data block 3" in Table 4 "Number codes used for melt mass-flow rate in data block 3" is amended to "data block 4" (see 4.5);

Plastics - Ethylene-vinyl alcohol (EVOH) copolymer molding
and extrusion materials - Part 1: Designation system and
basis for specifications

1 Scope

This document specifies the designation system for ethylene-vinyl alcohol (EVOH) copolymer thermoplastic materials, and the system can be used as the basis for classification.

Different types of ethylene-vinyl alcohol (EVOH) copolymer thermoplastic materials are distinguished with a classification system based on the following specified properties, such as melt mass-flow rate, together with recommended use and/or processing methods, important properties, additives, colorants, fillers, and reinforcing materials.

This document applies to copolymers of ethylene and vinyl alcohol with an ethylene content (mol fraction) of 15%~60%. This document applies to materials that are conventionally in the form of powders, granules or pellets, unmodified or modified by colorants, additives, fillers, etc.

This document does not imply that identically named materials will necessarily have identical properties. This document does not provide engineering data, performance data, or processing condition data necessary to describe a particular application and/or processing method for the material. If necessary, the test methods specified in GB/T

41877.2 are used to determine the additional information.

In order to illustrate the special use of thermoplastic materials or to ensure the reproducibility of processing, additional information may be given in data blocks 4 and

2 Normative references

The following documents contain the provisions which, through normative reference in this document, constitute the essential provisions of this document. For the dated referenced documents, only the versions with the indicated dates are applicable to this document; for the undated referenced documents, only the latest version (including all the amendments) is applicable to this document.

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