PLASTID. POLÜPROPÜLEENIST (PP) VORMIMIS- JA EKSTRUSIOONIMATERJALID. OSA 1: TÄHISTUSSÜSTEEM JA TEHNILISTE ANDMETE ALUSED

Plastics - Polypropylene (PP) moulding and extrusion materials - Part 1: Designation system and basis for specifications (ISO 19069-1:2015)

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 19069-1:2015 sisaldab Euroopa standardi EN ISO 19069-1:2015 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 19069-1:2015 consists of the English text of the European standard EN ISO 19069-1:2015.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 04.03.2015.	Date of Availability of the European standard is 04.03.2015.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 83.080.20

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 19069-1

March 2015

ICS 83.080.20

Supersedes EN ISO 1873-1:1995

English Version

Plastics - Polypropylene (PP) moulding and extrusion materials - Part 1: Designation system and basis for specifications (ISO 19069-1:2015)

Plastiques - Matériaux polypropylène (PP) pour moulage et extrusion - Partie 1: Système de désignation et base de spécification (ISO 19069-1:2015)

Kunststoffe - Polypropylen (PP)-Formmassen - Teil 1: Bezeichnungssystem und Basis für Spezifikationen (ISO 19069-1:2015)

This European Standard was approved by CEN on 10 January 2015.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN ISO 19069-1:2015 E

Foreword

This document (EN ISO 19069-1:2015) 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 2015, and conflicting national standards shall be withdrawn at the latest by September 2015.

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

This document supersedes EN ISO 1873-1:1995.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 19069-1:2015 has been approved by CEN as EN ISO 19069-1:2015 without any modification.

Contents

Page

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).

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).

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 meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 61, *Plastics*, Subcommittee SC 9, *Thermoplastic materials.*

This first edition of ISO 19069-1 cancels and replaces ISO 1873-1:1995, which has been technically revised to introduce a new designation system.

ISO 19069 consists of the following parts, under the general title *Plastics — Polypropylene (PP) moulding and extrusion materials:*

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

— *Part 2: Preparation of test specimens and determination of properties*

Plastics — Polypropylene (PP) moulding and extrusion materials —

Part 1: Designation system and basis for specifications

1 Scope

This part of ISO 19069 establishes a system of designation for polypropylene (PP) thermoplastic material, which can be used as the basis for specifications.

The types of polypropylene plastics are differentiated from each other by a classification system based on appropriate levels of the designatory properties

a) tensile modulus of elasticity,

b) impact strength, and

c) melt mass-flow rate (MFR),

and on information about basic polymer parameters, intended application and/or method of processing, important properties, additives, colorants, fillers, and reinforcing materials.

This part of ISO 19069 is applicable to all polypropylene homopolymers and to copolymers of propylene with a content of other 1-olefinic of less than 50 % (m/m), as well as blends of polymers containing at least 50 % (m/m) of aforementioned polymers.

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

This part of ISO 19069 does not apply to propylene-based rubber.

It is not intended to imply that materials having the same designation give necessarily the same performance. This part of ISO 19069 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 shall be determined in accordance with the test methods specified in ISO 19069-2[1)], 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 5 (see 3.1).

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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*

1) To be published.

ISO 1133 (all parts), *Plastics — Determination of the melt mass-flow rate (MFR) and melt volume-flow rate (MVR) of thermoplastics*

ISO 1873-2[2)], *Plastics — Polypropylene (PP) moulding and extrusion materials — Part 2: Preparation of test specimens and determination of properties*

3 Designation and specification system

3.1 General

The designation and specification system for thermoplastics is based on the following standardized pattern:

Designation						
Designation block (optional)	Identity block					
	International Standard number block	Individual-item block				
		Data block 1	Data block 2	Data block 3	Data block 4	Data block 5

The designation consists of an optional description block, reading "Thermoplastics", and an identity block comprising the International Standard number and an individual-item block. For unambiguous designation, the individual-item block is subdivided into five data blocks comprising the following information.

Data block 1: Identification of the plastic by its symbol PP in accordance with ISO 1043-1 and information about the polymerization process or composition of the polymer (see 3.2).

Data block 2: Fillers or reinforcing materials and their nominal content (see 3.3).

Data block 3: Position 1: Intended application or method of processing (see 3.4).

Positions 2 to 8: Important properties, additives, and supplementary information (see 3.4).

Data block 4: Designatory properties (see 3.5).

Data block 5: For the purpose of specifications, a fifth data block can be added containing additional information (see 3.6).

The first character of the individual-item block shall be a hyphen. The data blocks shall be separated from each other by commas.

If a data block is not used, this shall be indicated by doubling the separation sign, i.e. by two commas (,,).

3.2 Data block 1

In this data block, after the hyphen, polypropylene plastics are indentified by the symbol "PP", in accordance with ISO 1043-1, followed by a hyphen and a single code letter giving additional information on the polymer as specified in Table 1.

2) Will be revised with a new number ISO 19069-2.