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STN	**Plasty Fluoropolymérové disperzie a materiály na tvárnenie a vytláčanie Časť 1: Systém označovania a základy na špecifikáciu (ISO 20568-1: 2017)**	**STN EN ISO 20568-1 64 2604**

Plastics - Fluoropolymer dispersions and moulding and extrusion materials - Part 1: Designation system and basis for specifications (ISO 20568-1:2017)

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. 12/17

Obsahuje: EN ISO 20568-1:2017, ISO 20568-1:2017

Oznámením tejto normy sa ruší
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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 20568-1

June 2017

ICS 83.080.20

Supersedes EN ISO 12086-1:2006

English Version

Plastics - Fluoropolymer dispersions and moulding and extrusion materials - Part 1: Designation system and basis for specifications (ISO 20568-1:2017)

Plastiques - Polymères fluorés: dispersions et matériaux pour moulage et extrusion - Partie 1: Système de désignation et base de spécification (ISO 20568-1:2017)

Kunststoffe - Fluorpolymerdispersionen, Formmassen und Extrusionsmaterialien - Teil 1: Bezeichnungssystem und Basis für Spezifikationen (ISO 20568-1:2017)

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European foreword

This document (EN ISO 20568-1:2017) 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of an identical text or by endorsement, at the latest by December 2017, and conflicting national standards shall be withdrawn at the latest by December 2017.

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.

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Endorsement notice

The text of ISO 20568-1:2017 has been approved by CEN as EN ISO 20568-1:2017 without any modification.

INTERNATIONAL STANDARD

ISO 20568-1

First edition
2017-05

Plastics — Fluoropolymer dispersions and moulding and extrusion materials —

Part 1: Designation system and basis for specifications

Plastiques — Polymères fluorés: dispersions et matériaux pour moulage et extrusion —

Partie 1: Système de désignation et base de spécification

Reference number
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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 20568-1 cancels and replaces ISO 12086-1:2006, which has been technically revised to introduce a new designation system.

A list of all the parts in the ISO 20568 series can be found on the ISO website.

INTERNATIONAL STANDARD **ISO 20568-1:2017(E)**

Plastics — Fluoropolymer dispersions and moulding and extrusion materials —

Part 1: Designation system and basis for specifications

1 Scope

This document establishes a system of designation for fluoropolymer materials, which may be used as the basis for specifications.

The various types of fluoropolymer are differentiated from each other by a classification system based on appropriate levels of the designatory properties and on information about the intended application and/or method of processing, important properties, additives, colorants, fillers and reinforcing materials.

For polytetrafluoroethylene (PTFE)

For PTFE granular moulding and ram extrusion materials, and for PTFE resin produced from coagulation of dispersion:

— standard specific gravity (SSG)

— bulk density

— particle size

For aqueous dispersion of PTFE

— PTFE percentage in dispersion

— surfactant percentage in dispersion

— surfactant tolerance level

For melt processable resins

For CPT, ECTFE, EFEP, ETFE, FEP, PFA, PVDF, PVF, VDF/CTFE, VDF/HFP, VDF/TFE, VDF/TFE/HFP

— melting-peak temperature

— melt mass-flow rate

For PCTFE

— zero-strength time (ZST)

For TFE/PDD

— glass transition temperature (T_g)

For aqueous dispersion of melt processable resins (ETFE, FEP, PFA, PVDF, PVF, VDF/CTFE, VDF/HFP, VDF/TFE, VDF/TFE/HFP)

— polymer percentage in dispersion

— surfactant percentage in dispersion

— surfactant tolerance level

The designation system is applicable to all fluoropolymers and blends. It applies to unmodified materials ready for normal use and materials modified, for example, by colorants, additives, fillers, reinforcing materials and polymer modifiers.

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 may be required to specify a material. If such additional properties are required, they are intended to be determined in accordance with the test methods specified in ISO 20568-2, if suitable.

In order to specify a thermoplastic material for a particular specification, the requirements are to be 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 472, *Plastics — Vocabulary*

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*

ISO 11357-2, *Plastics — Differential scanning calorimetry (DSC) — Part 2: Determination of glass transition temperature and glass transition step height*

ISO 11357-3, *Plastics — Differential scanning calorimetry (DSC) — Part 3: Determination of temperature and enthalpy of melting and crystallization*

ISO 20568-2, *Plastics — Fluoropolymer dispersions and moulding and extrusion materials — Part 2: Preparation of test specimens and determination of properties*

ASTM D1430, *Standard Classification System for Polychlorotrifluoroethylene (PCTFE) Plastics*

ASTM D2116, *Standard Specification for FEP-Fluorocarbon Molding and Extrusion Materials*

ASTM D4441, *Standard Specification for Aqueous Dispersions of Polytetrafluoroethylene*

ASTM D4591, *Standard Test Method for Determining Temperatures and Heats of Transitions of Fluoropolymers by Differential Scanning Calorimetry*

ASTM D4894, *Standard Specification for Polytetrafluoroethylene (PTFE) Granular Molding and Ram Extrusion Materials*

ASTM D4895, *Standard Specification for Polytetrafluoroethylene (PTFE) Resins Produced From Dispersion*