SLOVENSKI STANDARD
SIST EN ISO 23900-5:2018

01-november-2018

Nadomešča:
SIST EN 13900-5:2005

Pigmenti in polnila - Metode dispergiranja in ocenjevanje disperzibilnosti v polimernih materialih - 5. del: Določevanje tlaka s preskusom na filtru (ISO 23900-5:2015)

Pigments and extenders - Methods of dispersion and assessment of dispersibility in plastics - Part 5: Determination by filter pressure value test (ISO 23900-5:2015)

Pigmente und Füllstoffe - Dispergierverfahren und Beurteilung der Dispergierbarkeit in Kunststoffen - Teil 5: Bestimmung mit dem Druckfiltertest (ISO 23900-5:2015)

Pigments et matières de charge - Méthodes de dispersion et évaluation de l'aptitude à la dispersion dans les plastiques - Partie 5: Détermination de la valeur de pression du filtre lors d'un essai (ISO 23900-5:2015)

Ta slovenski standard je istoveten z: **EN ISO 23900-5:2018**

ICS:

83.080.01	Polimerni materiali na splošno	Plastics in general
87.060.10	Pigmenti in polnila	Pigments and extenders

SIST EN ISO 23900-5:2018 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 23900-5

September 2018

ICS 87.060.10

Supersedes EN 13900-5:2005

English Version

Pigments and extenders - Methods of dispersion and assessment of dispersibility in plastics - Part 5: Determination by filter pressure value test (ISO 23900-5:2015)

Pigments et matières de charge - Méthodes de dispersion et évaluation de l'aptitude à la dispersion dans les plastiques - Partie 5: Détermination de la valeur de pression du filtre lors d'un essai (ISO 23900-5:2015)

Pigmente und Füllstoffe - Dispergierverfahren und Beurteilung der Dispergierbarkeit in Kunststoffen - Teil 5: Bestimmung mit dem Druckfiltertest (ISO 23900-5:2015)

This European Standard was approved by CEN on 18 August 2018.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Ref. No. EN ISO 23900-5:2018 E

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European foreword

The text of ISO 23900-5:2015 has been prepared by Technical Committee ISO/TC 256 "Pigments, dyestuffs and extenders" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 23900-5:2018 by Technical Committee CEN/TC 298 "Pigments and extenders" the secretariat of which is held by DIN.

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 March 2019, and conflicting national standards shall be withdrawn at the latest by March 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 13900-5:2005.

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Endorsement notice

The text of ISO 23900-5:2015 has been approved by CEN as EN ISO 23900-5:2018 without any modification.

INTERNATIONAL STANDARD

ISO 23900-5

First edition
2015-05-01

Pigments and extenders — Methods of dispersion and assessment of dispersibility in plastics —

Part 5: Determination by filter pressure value test

Pigments et matières de charge — Méthodes de dispersion et évaluation de l'aptitude à la dispersion dans les plastiques —

Partie 5: Détermination de la valeur de pression du filtre lors d'un essai

Reference number
ISO 23900-5:2015(E)

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Published in Switzerland

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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 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 256, *Pigments, dyestuffs and extenders*.

ISO 23900 consists of the following parts, under the general title *Pigments and extenders — Methods of dispersion and assessment of dispersibility in plastics*:

— *Part 1: General introduction*

— *Part 2: Determination of colouristic properties and ease of dispersion in plasticized polyvinyl chloride by two-roll milling*

— *Part 3: Determination of colouristic properties and ease of dispersion of black and colour pigments in polyethylene by two-roll milling*

— *Part 4: Determination of colouristic properties and ease of dispersion of white pigments in polyethylene by two-roll milling*

— *Part 5: Determination by filter pressure value test*

— *Part 6: Determination by film test*

Pigments and extenders — Methods of dispersion and assessment of dispersibility in plastics —

Part 5:
Determination by filter pressure value test

1 Scope

This part of ISO 23900 specifies a method of assessing the degree of dispersion of a colorant in a thermoplastic polymer.

The method is suitable for testing colorants in the form of colour concentrates in all polymers used for extrusion and melt-spinning processes.

The filter pressure value (FPV) determined according to this method is valid only for the equipment, conditions and test polymer being used. The use of test conditions differing from those specified might give different results. The method of preparing the colour concentrate is not specified in this part of ISO 23900. The results obtained for individual colorants are therefore comparable only when the same method of preparation for colour concentrates is used.

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.

EN 10088-1, *Stainless steels — Part 1: List of stainless steels*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
filter pressure value
FPV
pressure difference between the start pressure and the maximum pressure generated by extrusion in front of a screen pack related to the amount of colorant tested

4 Principle

The test mixture, consisting of a colour concentrate and a basic test polymer, is passed through an extruder fitted with melt pump and screen pack with breaker plate. In front of the screen pack is a melt pressure transducer. The pressure difference between the start pressure and the maximum pressure is used to calculate the filter pressure value (FPV).

5 Material

5.1 Colour concentrate

Homogeneous preparation of a colorant in an appropriate thermoplastic polymer.