Irish Standard
I.S. EN ISO 23900-3:2018

Pigments and extenders - Methods of dispersion and assessment of dispersibility in plastics - Part 3: Determination of colouristic properties and ease of dispersion of black and colour pigments in polyethylene by two-roll milling (ISO 23900-3:2015)

I.S. EN ISO 23900-3:2018

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National Foreword

I.S. EN ISO 23900-3:2018 is the adopted Irish version of the European Document EN ISO 23900-3:2018, Pigments and extenders - Methods of dispersion and assessment of dispersibility in plastics - Part 3: Determination of colouristic properties and ease of dispersion of black and colour pigments in polyethylene by two-roll milling (ISO 23900-3:2015)

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EUROPEAN STANDARD

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EUROPÄISCHE NORM

EN ISO 23900-3

January 2018

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Supersedes EN 13900-3:2003

English Version

Pigments and extenders - Methods of dispersion and assessment of dispersibility in plastics - Part 3: Determination of colouristic properties and ease of dispersion of black and colour pigments in polyethylene by two-roll milling (ISO 23900-3:2015)

Pigments et matières de charge - Méthodes de dispersion et évaluation de l'aptitude à la dispersion dans les plastiques - Partie 3: Détermination des propriétés colorimétriques et de la facilité de dispersion des pigments noirs et colorés dans le polyéthylène par calandrage sur bicylindre (ISO 23900-3:2015)

Pigmente und Füllstoffe - Dispergierverfahren und Beurteilung der Dispergierbarkeit in Kunststoffen: Teil 3: Bestimmung der koloristischen Eigenschaften und der Dispergierhärte von Schwarz- und Buntpigmenten in Polylethylen im Walztest (ISO 23900-3:2015)

This European Standard was approved by CEN on 4 January 2018.

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Contents

Page

European foreword..... 3

European foreword

The text of ISO 23900-3:2015 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 23900-3:2018 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 July 2018, and conflicting national standards shall be withdrawn at the latest by July 2018.

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.

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Endorsement notice

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I.S. EN ISO 23900-3:2018

INTERNATIONAL STANDARD

ISO 23900-3

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

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

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

Partie 3: Détermination des propriétés colorimétriques et de la facilité de dispersion des pigments noirs et colorés dans le polyéthylène par calandrage sur bicylindre

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Contents

Page

Foreword ..... **iv**

1 Scope **1**

2 Normative references **1**

3 Terms and definitions **1**

4 Principle **2**

5 Materials **2**
5.1 Materials for method A 2
5.1.1 Test medium 2
5.1.2 Titanium dioxide pigment 2
5.2 Materials for method B 2
5.2.1 Test medium 2
5.2.2 Titanium dioxide pigment 2

6 Apparatus **2**

7 Sampling **3**

8 Procedure **3**
8.1 Testing of colouristic properties in white reduction 3
8.1.1 Preparation of the mixtures 3
8.1.2 Two-roll milling 3
8.1.3 Pressing 4
8.1.4 Photometric measurement 4
8.2 Testing of ease of dispersion 4
8.2.1 Preparation of the test samples 4
8.2.2 Pressing and photometric measurement 4

9 Evaluation **4**

10 Test report **5**

11 Precision **5**

Bibliography **6**

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

1 Scope

This part of ISO 23900 specifies a method of determining in polyethylene (PE) the colouristic properties of a test pigment relative to a standard, and the ease of dispersion DH_{PE} of pigments from the differences in colour strength on dispersing colouring materials under various conditions.

Method A is appropriate for use with organic powder pigments and carbon black pigments in powder form, many of which are subject to compaction (reagglomeration under pressure), for inorganic pigments in powder form and for pigment preparations in powder or flake form.

Method B is appropriate for testing pigments and pigment preparations in granular form and for inorganic pigments in any form.

The ease of dispersion determined in this way is valid only for the dispersion equipment, dispersion conditions and dispersion medium being used. The use of test conditions differing from those specified may give different results; this applies both to the absolute magnitude and to the relation between values of the ease of dispersion of various pigments. The subscript DH_{PE} is therefore used to designate the value obtained as specified in this part of ISO 23900.

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 787-24:1985, *General methods of test for pigments and extenders — Part 24: Determination of relative tinting strength of coloured pigments and relative scattering power of white pigments — Photometric methods*

ISO 15528, *Paints, varnishes and raw materials for paints and varnishes — Sampling*

ISO 18314-1[1)], *Analytical colorimetry — Part 1: Practical colour measurement*

3 Terms and definitions

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

1) To be published.