INTERNATIONAL STANDARD

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Recycled pulps — Estimation of Stickies and Plastics —

Part 2: Image analysis method

Pâtes recyclées — Estimation des matières collantes et des matières plastiques —

Partie 2: Méthode par analyse d'image

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 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 6, *Paper, board and pulps*.

This second edition cancels and replaces the first edition (ISO 15360-2:2001), of which it constitutes a minor revision by moving the precision statement to an informative annex. It also incorporates the technical corrigendum ISO 15360-2:2001/Cor 1:2007.

ISO 15360 consists of the following parts, under the general title *Recycled pulps — Estimation of Stickies and Plastics*:

— *Part 1: Visual method*

— *Part 2: Image analysis method*

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Introduction

This part of ISO 15360 is complementary to ISO 15360-1, which concerns estimation of Stickies and Plastics in recycled pulp by visual examination. ISO 15360-2 is particularly useful for pulps having a high content of Stickies or Plastics or both where visual inspection is very time-consuming to carry out.

Two alternatives are given for the estimation of Stickies, while there is only one procedure for the estimation of Plastics.

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Recycled pulps — Estimation of Stickies and Plastics —

Part 2:
Image analysis method

1 Scope

This part of ISO 15360 specifies a method to estimate Stickies and Plastics in all grades of recycled pulp. It applies the principles for the separation of Stickies and Plastics described in ISO 15360-1. The visualization and counting techniques described in ISO 15360-1 are replaced here by image analysis.

This part of ISO 15360 permits the use of different laboratory screening devices as well as screens of different sizes when applying the specified method. It is impracticable to define more closely the equipment or screen sizes to be used, because of the wide range of Stickies and Plastics found in recycled pulps, and the various screening devices which are being successfully used for their measurement.

NOTE This method will only estimate those Stickies and Plastics which are tacky and which are retained on the screen of a given slit size under the temperature and pressure conditions of this test method. It is important to note that this will probably not be the total amount of Stickies and Plastics that are actually present in a given pulp sample.

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 638, *Paper, board and pulps — Determination of dry matter content — Oven-drying method*

ISO 4119, *Pulps — Determination of stock concentration*

ISO 5263 (all parts), *Pulps — Laboratory wet disintegration*

ISO 5269-2, *Pulps — Preparation of laboratory sheets for physical testing — Part 2: Rapid-Köthen method*

ISO 7213, *Pulps — Sampling for testing*

ISO 8486-1, *Bonded abrasives — Determination and designation of grain size distribution — Part 1: Macrogrits F4 to F220*

DIN 54516, *Testing of paper and board — Determination of plybond resistance*

TAPPI T 541 om-89, *Internal bond strength of paperboard (z-direction tensile)*

3 Terms and definitions

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

3.1
Stickies
diverse group of materials that are retained on a laboratory screen of given slit aperture (100 µm or 150 µm) and which adhere to objects that they touch

Note 1 to entry: Stickies can adhere to objects at ambient conditions or they can adopt adhesive characteristics when subjected to elevated temperature, elevated pressure or change pH.

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