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**Recycled pulps — Estimation of Stickies  
and Plastics —**

**Part 1:  
Visual method**

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

*Partie 1: Méthode visuelle*





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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this part of ISO 15360 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 15360-1 was prepared by Technical Committee ISO/TC 6, *Paper, board and pulps*, Subcommittee SC 5, *Test methods and quality specifications for pulp*.

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*

Annexes A and B form a normative part of this part of ISO 15360.



## Introduction

The production of pulp from de-inked recovered fibres and from brown or mixed waste grades is increasing in many parts of the world. Many of the recovered papers used in the production of recycled pulps contain adhesives, latex and other materials, which are either intrinsically "tacky" or can become so under appropriate conditions of temperature, pH and pressure. Residual particles of such materials can cause problems when the pulp is subsequently used in paper manufacture. In addition, recycled pulp feedstock is sometimes derived from material that has been plastics coated and the presence of plastics in the finished pulp can also cause problems, especially in the manufacture of coated papers. Moreover, plastics found in recovered paper may also come from a collection which has not been properly sorted.

International Standards exist for the determination of visible dirt and shives in pulp and these could be applied to de-inked pulp. However Stickies and Plastics are often similar to the pulp in colour and, even when large, are difficult to detect by visual inspection. Different techniques have thus to be employed.

This part of ISO 15360 is based on a visual identification and count of the Stickies and Plastics. Instrumental techniques are also available for estimating Stickies and Plastics. However, these are less widely used but may be the basis of a future International Standard for Stickies and Plastics in recycled pulps.

**NOTE** Different types of laboratory screening equipment, complying with this part of ISO 15360 may be used to isolate the Stickies and Plastics from the cellulose stock. It should be noted that different types of laboratory screening equipment may give different results. Furthermore, screening equipment of the same style fitted with different screens complying with this part of ISO 15360 may also give different results because of the difference in the distribution of slit sizes within the screen.



# Recycled pulps — Estimation of Stickies and Plastics —

## Part 1: Visual method

### 1 Scope

This part of ISO 15360 specifies a method to estimate Stickies and Plastics in a wide variety of pulps including all recycled grades. It is not intended for the estimation of visible dirt and shives which is covered by the ISO 5350 series, or for visible contraries in recycled pulps, which is covered by ISO 15319 [1].

This method will only capture those Stickies and Plastics which are retained on the screen of a given slit size. It should be noted 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 normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 15360. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 15360 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 638, *Pulps — Determination of dry matter content.*

ISO 4119, *Pulps — Determination of stock concentration.*

ISO 5263, *Pulps — Laboratory wet disintegration.*

ISO 5269-1, *Pulps — Preparation of laboratory sheets for physical testing — Part 1: Conventional sheet-former method.*

ISO 5350-1, *Pulps — Estimation of dirt and shives — Part 1: Inspection of laboratory sheets.*

ISO 5350-2, *Pulps — Estimation of dirt and shives — Part 2: Inspection of mill sheeted pulp.*

ISO 7213, *Pulps — Sampling for testing.*