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Coal — Methods for evaluating flocculants for use in coal preparation —

Part 1: Basic parameters

Charbon — Méthodes d'évaluation des floculants utilisés dans la préparation des charbons —

Partie 1: Paramètres de base

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

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Foreword

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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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This document was prepared by Technical Committee ISO/TC 27, *Solid mineral fuels*, Subcommittee SC 1, *Coal preparation: Terminology and performance*.

This second edition cancels and replaces the first edition (ISO 10086-1:2000), of which it constitutes a minor revision.

A list of all parts in the ISO 10086 series can be found on the ISO website.

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Coal — Methods for evaluating flocculants for use in coal preparation —

Part 1: Basic parameters

1 Scope

This document specifies a method for the comparative evaluation of the performances of flocculants for clarification, thickening and sedimentation applications on a given slurry. This performance can be evaluated by

a) the settling velocity in the initial period,

b) the sediment volume after compaction and consolidation, and

c) the clarity of the supernatant liquid.

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 1171, *Solid mineral fuels — Determination of ash*

ISO 1953, *Hard coal — Size analysis by sieving*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

4 Principle

The performance of different flocculants on a given slurry is determined by measuring the relative settling rates.

A flocculant solution is added to an aliquot of the slurry in a measuring cylinder and the formation of an interface between the supernatant liquid and the suspension is observed. An initial settling rate is calculated and is plotted against flocculant dosage to evaluate the performance of the flocculant.

5 Apparatus

Usual laboratory apparatus, and

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