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Pulps—Determination of Kappa number

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In the event of any doubts arising as to the contents, the original JIS is to be the final authority.

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Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry, through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Technical Association of the Pulp and Paper Industry (JAPAN TAPPI)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently JIS P 8211:1998 is replaced with this Standard.

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JIS P 8211 : 2011 (ISO 302 : 2004)

Pulps—Determination of Kappa number

Introduction

This Japanese Industrial Standard has been prepared based on the second edition of **ISO 302** published in 2004 without modifying the technical contents.

1 Scope

This Standard specifies a method for the determination of the Kappa number of pulp. The Kappa number is an indication of the lignin content or bleachability of pulp.

This Standard is applicable to all kinds of chemical pulps and semi-chemical pulps within the Kappa number range 1 to 100.

To achieve the greatest precision and accuracy, the sample size should be adjusted so that the consumption of permanganate falls between 20 % and 60 % of the amount added.

- NOTE 1 There is no general and unambiguous relationship between the Kappa number and the lignin content of pulp. The relationship varies according to the wood species and delignification procedure. All compounds oxidized by KMnO₄, not only lignin, will increase the consumption of KMnO₄, and thereby increase the Kappa number ^[7]. If the Kappa number is to be used to derive an index of pulp lignin content, specific relationships will have to be developed for each pulp type.
- NOTE 2 For pulps with a Kappa number exceeding 100, use the chlorineconsumption procedure (**ISO 3260**) to describe the degree of delignification.
- NOTE 3 The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows:

ISO 302:2004 Pulps—Determination of Kappa number (IDT)

The symbols which denote the degree of correspondence in the contents between the relevant International Standard and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

- JIS P 8201 Pulps—Sampling for testing
 - NOTE : Corresponding International Standard: ISO 7213 Pulps—Sampling for $testing \ (MOD)$
- JIS P 8203 Paper, board and pulps—Determination of dry matter content—Ovendrying method
 - NOTE: Corresponding International Standard: ISO 638 Paper, board and pulps—Determination of dry matter content—Oven-drying method (IDT)