SLOVENSKI STANDARD
SIST ISO 699:2016

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Vlaknine - Določanje odpornosti proti alkalijam

Pulps - Determination of alkali resistance

Pâtes - Détermination de la résistance aux solutions d'hydroxyde de sodium

Ta slovenski standard je istoveten z: **ISO 699:2015**

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85.040	Vlaknine	Pulps

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INTERNATIONAL STANDARD

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Pulps — Determination of alkali resistance

Pâtes — Détermination de la résistance aux solutions d'hydroxyde de sodium

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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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 third edition cancels and replaces the second edition (ISO 699:1982), of which it constitutes a minor revision.

Introduction

The object of both this International Standard and ISO 692, *Pulps — Determination of alkali solubility,* is to permit the study of the behaviour of pulps in the presence of alkali solutions, but their fields of application are different. While this International Standard describes the gravimetric determination of the alkali insoluble constituents of the pulp and applies to all categories of pulps, ISO 692 describes the volumetric determination of the alkali soluble constituents of the pulp and is applied preferably to the control of bleached pulps.

Pulps — Determination of alkali resistance

WARNING — The method specified in this International Standard involves the use of hazardous chemicals. Appropriate precautions are to be taken to ensure the proper use and disposal of these chemicals.

1 Scope

This International Standard specifies a method for the determination of the alkali-insoluble fraction of pulps using sodium hydroxide solution of fixed concentration. The sodium hydroxide concentrations most frequently used are 18, 10, and 5 % (*m*/*m*).

The method is applicable to all kinds of pulp.

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 4793, *Laboratory sintered (fritted) filters — Porosity grading, classification and designation*

3 Terms and definitions

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

3.1
***R*-value**
alkali resistance; the insoluble fraction expressed as a percentage by mass of the oven-dry pulp

3.2
R_{18}, R_{10}, R_5, or R_c
R-values in which the indices 18, 10, 5, or *c* refer to the chosen concentration in grams of sodium hydroxide per 100 g of solution

4 Principle

Defibreing of the pulp under specified conditions in sodium hydroxide solution of chosen concentration.

Filtering of the insoluble fraction, washing with sodium hydroxide solution of the same concentration, and temperature as that used for defibreing and acidification, washing, drying, and weighing.

5 Reagents

Use only reagents of recognized analytical grade and only distilled water or water of equivalent purity.

5.1 Sodium hydroxide, solution of known concentration containing less than 1 g of sodium carbonate per litre (see the notes), for example:

— (5,39 ± 0,03) mol/l solution, containing (18,0 ± 0,1) g of sodium hydroxide per 100 g of solution (ρ_{20} = 1,197 2 g/ml), equivalent to (215,5 ± 1,0) g of sodium hydroxide per litre;