
**Textiles — Qualitative and
quantitative analysis of some cellulose
fibres (lyocell, cupro) and their
blends —**

**Part 3:
Blend quantification using spectral
analysis method**

*Textiles — Analyses qualitative et quantitative de certaines fibres
cellulosiques (lyocell, cupro) et leurs mélanges —*

*Partie 3: Quantification du mélange par une méthode d'analyse
spectrale*

ISO 21915-3:2020

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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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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 38, *Textiles*.

A list of all parts in the ISO 21915 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The qualitative and quantitative determination of fibres is important for the distribution of textile products. In many countries, it is legally obligatory for producers to attach information on the type of fibres used and their mixing ratio to textile products.

Therefore, it is desirable that qualitative methods of all fibres used in textile products and quantitative methods in the case where fibres are mixed (all combinations that can be assumed) exist as test standards.

Cupro and lyocell described in this document are regenerated fibres made from plants and can be said to be materials that contribute to a sustainable society in that raw materials are not derived from petroleum.

However, cupro and lyocell are difficult to qualify. Because the characteristics of appearance, chemical resistance, infrared spectroscopy (IR) spectrum, etc. are almost the same, the qualitative property according to ISO/TR 11827 and the quantification by the ISO 1833 series cannot be performed in some cases. That is, even if we know that unknown fibre is a cupro or lyocell, we cannot identify which one is.

Therefore, it is difficult to distinguish cupro or lyocell if the cupro or lyocell exists in the textile product or the possibility that cupro and lyocell are mixed completely cannot be denied.

ISO 21915 is composed of three parts. ISO 21915-1 specifies the identification method of cupro and lyocell by scanning electron microscope and infrared spectrum analysis. Those may be the time-consuming methods to use the composition analysis. ISO 201915-2 and this document specify the methods for the composition analysis. The methods used is determined by the instrument availability and experience.

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