JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS L 1030-3-1 : 2023

Testing methods for quantitative analysis of fibre mixtures of textiles — Part 3-1: Instrumental analysis of some animal hair fibres — Using MALDI-TOF MS testing methods for quantitative analysis of fibre mixtures

ICS 59.060.01
Reference number : JIS L 1030-3-1 : 2023 (E)

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Date of Establishment: 2023-01-20

Date of Public Notice in Official Gazette: 2023-01-20

Investigated by: Japanese Industrial Standards Committee

Standards Board for ISO area

Technical Committee on Consumer Life Products

JIS L 1030-3-1 : 2023, First English edition published in 2024-07

Translated and published by: Japanese Standards Association
Mita Avanti Building, 3-11-28, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

In the event of any doubts arising as to the contents,
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Contents

Page

Introduction ····· 1
1 Scope ····· 1
2 Normative references ····· 2
3 Terms and definitions ····· 2
4 Test atmosphere ····· 4
5 Principle ····· 4
6 Sampling and preparation of samples and specimens ····· 4
7 Reagents ····· 4
8 Apparatus and materials ····· 7
9 Test methods ····· 8
10 Calculation of composition ····· 11
11 Test results ····· 12
12 Repeatability and reproducibility ····· 12
13 Test report ····· 13
Annex A (informative) Example of SDS-PAGE image of extracted proteins ····· 14
Annex B (informative) Animal species-specific peak positions in MALDI-TOF MS analysis ····· 16
Annex C (informative) Example of animal species-specific peaks in MALDI-TOF MS analysis ····· 17
Annex D (informative) Example of calibration curve for cashmere-wool blend ····· 18
Annex E (informative) Example of calibration curve for cashmere-yak blend ····· 19
Annex F (informative) Repeatability and reproducibility ····· 20
Annex G (informative) Analysis of blind test samples using MALDI-TOF MS method ····· 22
Annex H (informative) Results of interlaboratory trial ····· 23
Annex JA (informative) Examples of standard peptides used for mass correction of MALDI-TOF MS ····· 26
Annex JB (informative) Example of calibration curve for wool-yak blend ····· 27
Annex JC (informative) Identification of camel and alpaca by MALDI-TOF

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MS ····· 28

Annex JD (informative) Comparison table between JIS and corresponding International Standard ····· 32

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Foreword

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Testing methods for quantitative analysis of fibre mixtures of textiles — Part 3-1 : Instrumental analysis of some animal hair fibres — Using MALDI-TOF MS testing methods for quantitative analysis of fibre mixtures

Introduction

This Japanese Industrial Standard has been prepared based on ISO 20418-2 : 2018, Edition 1, with some modifications of the technical contents to reflect the local conditions in Japan.

The dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JD.

The composition labelling of textile products greatly influences characteristics and prices of textile products and is an item that significantly affects all parties concerned in the textile industry from product manufacturers, distributors and sellers, to consumers who purchase textile products. Consequently, it has been a common practice to conduct high level analysis of fibre composition using microscopic techniques and experience of analysts.

In contrast to such conventional methods, this Standard provides a quantitative and qualitative analysis method utilizing advanced instrument that, by establishing analysis methods adapted to domestic fibre products in Japan, can help improve the reliability of high-grade animal hair fibre products for manufacturers, distributors, sellers, and consumers, thereby stimulating the production and sales of such products, and promoting the purchase and expanding markets.

1 Scope

This Standard specifies a qualitative and quantitative procedure to determine the composition of animal hair fibre blends by MALDI-TOF MS. The composition of non-animal hair fibres can be measured by methods described in JIS L 1030-2. The results from the procedures described in this Standard and JIS L 1030-2 can determine the whole composition of textile products containing animal fibres with higher accuracy.

The method covered by this Standard is based on a preliminary identification of animal fibres in an unknown fibre blend according to JIS L 1030-1. It is primarily applied to fibre blends of wool, goat hair and yak hair, but may also be applied to rabbit, alpaca, and other animal hair fibres. However, if the textile contains animal hairs belonging to the same species, such as a combination of cashmere and mohair, it is not possible to distinguish the two by using this Standard alone.

NOTE The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 20418-2 : 2018 *Textiles — Qualitative and quantitative proteomic*

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