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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 44476-2024

**Hair products-Test method for qualitative analysis of human
hair-Near infrared spectroscopy method**

发制品 人发鉴别方法 近红外光谱法

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents". Drafting is required.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was proposed by the China Light Industry Federation.

This document is under the jurisdiction of the National Technical Committee for Standardization of Hair Products (SAC/TC 304).

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Identification methods of human hair products Near-infrared spectroscopy

1 Scope

This document describes a method for the qualitative identification of human hair and for the determination of fiber content in two-component mixtures of human and animal hair using near-infrared spectroscopy.

This document applies to pure human hair and mixtures of human hair and animal hair with a human hair content ranging from 5.0% to 95.0%.

2 Normative references

GB/T 2910

GB/T 29858-2013

GB/T 37969-2019

3 Terms and Definitions

The terms and definitions defined in GB/T 29858-2013, GB/T 37969-2019 and the following apply to this document.

3.1 hair fiber

Human or animal hair.

3.2 calibration samples

The sample used to establish the calibration model has known component concentration or property data.

[Source. GB/T 29858-2013, 3.3]

3.3 validation samples

Samples used to verify model performance, whose component concentrations or property data are known.

[Source. GB/T 29858-2013, 3.6]

3.4 reference values

The concentration or property of a component in a calibration or verification sample determined using a reference method.

[Source. GB/T 29858-2013, 3.9]

3.5 discriminant rate

The percentage of correct samples identified by the qualitative model to the total number of validation samples is used to evaluate the model in qualitative analysis.

Actual discrimination ability.

[Source. GB/T 37969-2019, 3.8, modified]

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