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

**GB/T 44161-2024**

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**Disperse dyestuffs-Determination of thermal migration**

分散染料 热迁移性的测定

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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 Petroleum and Chemical Industry Federation.

This document is under the jurisdiction of the National Technical Committee on Standardization of Dyes (SAC/TC 134).

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Determination of thermal migration of disperse dyes

### 1 Scope

This document describes a method for the determination of the thermal mobility of disperse dyes.

This document applies to the determination of thermal migration of disperse dyes.

## 2 Normative references

GB/T 251

GB/T 2374-2017

GB/T 2394-2024

GB/T 4841.1

GB/T 4841.2

GB/T 5718-1997

GB/T 6687

GB/T 7568.2

GB/T 25811

## 3 Terms and definitions

The terms and definitions defined in GB/T 6687 and the following apply to this document.

### 3.1 Thermal migration

A property of colored fabrics in which the dye migrates from the inside of the fiber to the surface of the fiber during dry heat treatment.

## 4 Principle

Disperse dyes are used on polyester fabrics to dye a certain depth of color using high temperature and high pressure dyeing method, and then dry heat treatment at a certain temperature and time is performed.

After treatment, the dispersion is evaluated by rating the adjacent fabric or by extracting the migrated dye on the colored sample with a solvent and measuring the absorbance of the extract solution. Migration of dyes.

## 5 Reagents and Materials

Reagents and materials should meet the following requirements.

Specifications of polyester fabric for dyeing. in accordance with the requirements of GB/T 25811; a) Cotton standard adjacent fabric specifications. in accordance with the requirements of GB/T 7568.2; b) N,N'-dimethylformamide (DMF), analytical grade. c)