



BSI Standards Publication

Textiles — Determination of quinoline, isoquinoline and certain derivatives

National foreword

This British Standard is the UK implementation of EN ISO 13144:2025. It is identical to ISO 13144:2025.

The UK participation in its preparation was entrusted to Technical Committee TCI/100, Co-ordination of activities in textiles and clothing.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

This document (EN ISO 13144:2025) has been prepared by Technical Committee ISO/TC 38 "Textiles" in collaboration with Technical Committee CEN/TC 248 "Textiles and textile products" the secretariat of which is held by BSI.

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Endorsement notice

The text of ISO 13144:2025 has been approved by CEN as EN ISO 13144:2025 without any modification.

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Foreword

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This document was prepared by Technical Committee ISO/TC38, *Textiles*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 248, *Textiles and textile products*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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Introduction

Quinoline, which is used in certain dyes, is classified as a carcinogenic substance. It has a high solubility in water and this tendency makes it of concern in manufacturing processes where the dyed textiles are washed. It can also be found as residue in textiles and textile products where it can easily come into skin contact. A series of studies have shown the potential harm to humans as well as downstream aquatic life. Quinoline is thus restricted in the European Union in:

- a) clothing or related accessories;
- b) textiles other than clothing which, under normal or reasonably foreseeable conditions of use, come into contact with human skin to an extent similar to clothing;
- c) footwear^[1].

Quinoline derivatives are compounds that can be synthesized from a quinoline compound by replacement of one atom with another atom or group of atoms. Considering their toxicity on several animal species, it is important to set up an effective and precise test method to determine the content of them.

The test method described in this document is based on the use of gas chromatography with mass spectrometry (GC-MS) or liquid chromatography with mass spectrometry (LC-MS).

