
**Textiles — Methods for determination
of certain aromatic amines derived
from azo colorants —**

**Part 3:
Detection of the use of certain
azo colorants, which may release
4-aminoazobenzene**

*Textiles — Méthodes de détermination de certaines amines
aromatiques dérivées de colorants azoïques —*

*Partie 3: Détection de l'utilisation de certains colorants azoïques
susceptibles de libérer du 4-aminoazobenzène*



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Published in Switzerland

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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. www.iso.org/directives

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The committee responsible for this document is ISO/TC 38, *Textiles*.

This international standard consists of the following parts, under the general title *Textiles — Methods for determination of certain aromatic amines derived from azo colorants*:

- *Part 1: Detection of the use of certain azo colorants accessible with and without extracting the fibres*
- *Part 3: Detection of the use of certain azo colorants, which may release 4-aminoazobenzene*

Introduction

This part of ISO 24362 is based on EN 14362-3:2012 which has been prepared by Technical Committee CEN/TC 248 "Textiles and textile products", the secretariat of which is held by BSI.

Textiles — Methods for determination of certain aromatic amines derived from azo colorants —

Part 3:

Detection of the use of certain azo colorants, which may release 4-aminoazobenzene

1 Scope

Azo colorants that are able to form 4-aminoazobenzene, generate under the conditions of ISO 24362-1 the amines aniline and 1,4-phenylenediamine. The presence of these 4-aminoazobenzene colorants cannot be reliably ascertained without additional information (e.g. the chemical structure of the colorant used) or without a special procedure.

This part of ISO 24362 is supplementary to ISO 24362-1 and describes a special procedure to detect the use of certain azo colorants in commodities, which may release 4-aminoazobenzene,

- accessible to reducing agent without extraction, particularly concerning textiles made of cellulose and protein fibres (e.g. cotton, viscose, wool, silk);
- accessible by extracting the fibres (e.g. polyester or imitation leather).

For certain fibre blends both parts of ISO 24362 (without or with extraction) may need to be applied.

The procedure detects as well 4-aminoazobenzene (Solvent Yellow 1) which is already available as free amine in commodities without reducing pre-treatment.

The use of certain azo colorants, which may release by reductive cleavage of their azo group(s) one or more of the other aromatic amines listed in the *Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) as regards Annex XVII*, except 4-aminoazobenzene, cannot be determined quantitatively with this method.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 24362-1:2014, *Textiles — Methods for determination of certain aromatic amines derived from azo colorants — Part 1: Detection of the use of certain azo colorants accessible with and without extracting the fibres*

ISO 3696, *Water for analytical laboratory use — Specification and test methods*

3 General

Certain azo colorants may release, by reductive cleavage of azo group(s), 4-aminoazobenzene, which is proscribed under *Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) as regards Annex XVII*.