

# DIN EN ISO 14362-1:2017-05 (E)

## 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 14362-1:2017)

---

<b>Contents</b>	<b>Page</b>
<b>European foreword</b> .....	<b>4</b>
<b>Foreword</b> .....	<b>5</b>
<b>1 Scope</b> .....	<b>6</b>
<b>2 Normative references</b> .....	<b>6</b>
<b>3 Terms and definitions</b> .....	<b>6</b>
<b>4 General</b> .....	<b>6</b>
<b>5 Principle</b> .....	<b>8</b>
<b>6 Safety precautions</b> .....	<b>8</b>
<b>7 Reagents</b> .....	<b>8</b>
<b>8 Apparatus</b> .....	<b>9</b>
<b>9 Test specimen sampling and preparation</b> .....	<b>11</b>
9.1 General.....	11
9.2 Textile article.....	11
9.3 Fibre composition.....	11
9.4 Case of the fibre blends.....	12
9.5 Coloured materials with pigments.....	12
9.6 Colours.....	12
9.6.1 General.....	12
9.6.2 Case of colour gathering.....	12
9.6.3 Preparation of the three colour test specimen.....	13
<b>10 Procedure</b> .....	<b>13</b>
10.1 Colorant extraction for disperse dyes with xylene.....	13
10.2 Textiles coloured with pigments and/or dyed with colorants other than disperse dyes.....	13
10.3 Reductive cleavage.....	13
10.4 Separation and concentration of the amines.....	13
10.5 Amine detection and quantification.....	14
10.5.1 Detection of aniline and 1,4-phenylenediamine (indicators of 4-aminoazobenzene).....	14
10.5.2 In relation to quantification equipment / other sources of false positive results.....	14
10.6 Check procedure.....	15
10.6.1 General.....	15
10.6.2 Calibration using internal standard (quantification performed by gas chromatography).....	15
10.6.3 Calibration without internal standard.....	16
10.6.4 Amine recovery.....	16
<b>11 Evaluation</b> .....	<b>16</b>
11.1 General.....	16
11.2 Calculation of amine in the sample.....	17
11.3 Reliability of the method.....	17
<b>12 Test report</b> .....	<b>17</b>

<b>Annex A (informative) Chromatographic analyses</b> .....	<b>18</b>
<b>Annex B (informative) Reliability of the method</b> .....	<b>22</b>
<b>Annex C (informative) Assessment guide — Interpretation of analytical results</b> .....	<b>24</b>
<b>Annex D (informative) Explanatory table of dyestuffs used in various textile materials</b> .....	<b>30</b>
<b>Annex E (informative) Procedure for liquid/liquid extraction without diatomaceous earth</b> .....	<b>31</b>
<b>Annex F (normative) Colorants — Methods for determination of certain aromatic amines</b> .....	<b>34</b>
<b>Annex G (informative) Pigments</b> .....	<b>35</b>
<b>Bibliography</b> .....	<b>37</b>