

# DIN ISO 8454:2025-03 (E)

## Cigarettes - Determination of carbon monoxide in the vapour phase of cigarette smoke - NDIR method (ISO 8454:2024)

---

<b>Contents</b>	<b>Page</b>
<b>National foreword</b> .....	<b>3</b>
<b>National Annex NA (informative) Bibliography</b> .....	<b>4</b>
<b>Foreword</b> .....	<b>5</b>
<b>Introduction</b> .....	<b>6</b>
<b>1 Scope</b> .....	<b>7</b>
<b>2 Normative references</b> .....	<b>7</b>
<b>3 Terms and definitions</b> .....	<b>7</b>
<b>4 Principle</b> .....	<b>7</b>
<b>5 Apparatus</b> .....	<b>8</b>
<b>6 Standard gas mixtures</b> .....	<b>8</b>
<b>7 Procedure</b> .....	<b>9</b>
7.1 Conditioning .....	9
7.2 Calibration of the NDIR analyser .....	9
7.3 Smoking and collection of vapour phase .....	10
7.3.1 Preparation of vapour-phase collection system .....	10
7.3.2 Smoking procedure .....	10
7.4 Measurement of carbon monoxide volume concentration .....	10
<b>8 Expression of results</b> .....	<b>10</b>
8.1 Calculation of the average volume of carbon monoxide per cigarette .....	10
8.2 Calculation of the average mass of carbon monoxide per cigarette .....	11
<b>9 Repeatability and reproducibility</b> .....	<b>11</b>
<b>10 Test report</b> .....	<b>12</b>
<b>Bibliography</b> .....	<b>13</b>