

# DIN EN ISO 14644-15:2018-03 (E)

## Cleanrooms and associated controlled environments - Part 15: Assessment of suitability for use of equipment and materials by airborne chemical concentration (ISO 14644-15:2017)

---

<b>Contents</b>	<b>Page</b>
European foreword.....	3
Foreword.....	4
Introduction.....	5
<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 Symbols</b> .....	<b>9</b>
<b>5 Test setup</b> .....	<b>10</b>
5.1 General.....	10
5.2 Closed design.....	10
5.3 Closed design special application.....	11
5.4 Open design.....	12
<b>6 Representative mode</b> .....	<b>12</b>
6.1 Equipment.....	12
6.2 Material.....	12
<b>7 Visual inspection</b> .....	<b>13</b>
7.1 General.....	13
7.2 Equipment.....	13
7.3 Material.....	13
<b>8 Test description</b> .....	<b>14</b>
<b>9 Calculation of the measured concentrations</b> .....	<b>14</b>
<b>10 Calculation of specific emission rate</b> .....	<b>15</b>
10.1 Calculation of specific emission rate — Closed design.....	15
10.2 Calculation of specific emission rate — Open design.....	16
<b>11 Assessment</b> .....	<b>16</b>
11.1 General.....	16
11.2 Required input data.....	17
11.3 Calculation to determine the effect on a cleanroom or controlled zone.....	17
11.4 Assessment of the suitability of material(s) or equipment for an existing cleanroom or controlled zone.....	18
<b>12 Documentation</b> .....	<b>18</b>
12.1 General.....	18
12.2 Common documentation requirements.....	18
12.3 Test documentation.....	19
12.4 Visual inspection.....	19
12.4.1 Equipment.....	19
12.4.2 Materials.....	19
<b>Annex A (informative) Example calculation for suitability assessment of one equipment (existing installation)</b> .....	<b>20</b>
<b>Annex B (informative) Example calculation for suitability assessment of wall material (existing cleanroom/clean zone installation)</b> .....	<b>22</b>
<b>Annex C (informative) Suitability assessment of a combination of equipment and floor material in a cleanroom to be designed</b> .....	<b>24</b>
<b>Bibliography</b> .....	<b>26</b>