DIN EN ISO 14644-15:2026-08 (E)

Cleanrooms and associated controlled environments - Part 15: Assessment of suitability for use of equipment and materials by airborne chemical concentration (ISO 14644-15:2026)

Contents

Page

Foreword ... **iv**

Introduction ... **v**

1 Scope ... **1**

2 Normative references ... **1**

3 Terms and definitions ... **1**

4 Symbols ... **4**

5 Test setup ... **4**
5.1 General ... 4
5.2 Closed design ... 5
5.3 Closed design special application ... 6
5.4 Open design ... 7

6 Representative mode ... **7**
6.1 Equipment ... 7
6.2 Material ... 7

7 Visual inspection ... **8**
7.1 General ... 8
7.2 Equipment ... 8
7.3 Material ... 8

8 Test description ... **9**

9 Calculation of the measured concentrations ... **9**

10 Calculation of specific emission rate ... **10**
10.1 Calculation of specific emission rate — Closed design ... 10
10.2 Calculation of specific emission rate — Open design ... 10

11 Assessment ... **11**
11.1 General ... 11
11.2 Required input data ... 11
11.3 Calculation to determine the effect on a cleanroom or controlled zone ... 12
11.4 Assessment of the suitability of material(s) or equipment for an existing cleanroom or controlled zone ... 12

12 Documentation ... **12**
12.1 General ... 12
12.2 Common documentation requirements ... 13
12.3 Test documentation ... 13
12.4 Visual inspection ... 13
12.4.1 Equipment ... 13
12.4.2 Materials ... 13

Annex A (informative) **Example calculation for suitability assessment of one equipment (existing installation)** ... **14**

Annex B (informative) **Example calculation for suitability assessment of wall material (existing cleanroom/clean zone installation)** ... **16**

Annex C (informative) **Suitability assessment of a combination of equipment and floor material in a cleanroom to be designed** ... **17**

Bibliography ... **19**