DIN ISO 16900-4:2017-10 (E)

Respiratory protective devices - Methods of test and test equipment - Part 4: Determination of gas filter capacity and migration, desorption and carbon monoxide dynamic testing (ISO 16900-4:2011)

Contents

Page

National foreword 3

Foreword 4

Introduction 5

1 Scope 6

2 Normative references 6

3 Terms and definitions 6

4 Prerequisites 7

5 General test requirements 7

6 Principles 8
6.1 Sorption tests 8
6.2 Migration and desorption tests 8
6.3 Carbon monoxide (CO) dynamic testing of type CO filter 8

7 Apparatus 8
7.1 Apparatus for constant flow 8
7.2 Challenge gas generator 8
7.3 Test chamber 9
7.4 Detector 9
7.5 Apparatus for dynamic flow 9

8 Methods 12
8.1 General 12
8.2 Test flow conditions 12
8.3 Gas capacity test 13
8.4 Gas filter validation test at specified flow rates 14
8.5 Migration test A and Migration test B 14
8.6 Desorption test 15

9 Test report 15
9.1 General 15
9.2 Gas capacity test 15
9.3 Gas filter validation test at specified flow rates 15
9.4 Migration test 15
9.5 Desorption test 15
9.6 CO dynamic test 15

10 Uncertainty of measurement 15

Annex A (normative) Application of uncertainty of measurement 16

Annex B (informative) Alternative method for the gas filter validation test at specified flow rates 18

Bibliography 21