

DIN EN 1822-1:2011-01 (E)

High efficiency air filters (EPA, HEPA and ULPA) - Part 1: Classification, performance testing, marking

Contents	Page
Foreword	3
Introduction	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Symbols and abbreviations	5
5 Classification	6
5.1 General	6
5.2 Groups of filters	6
5.3 Groups and Classes of filters	6
6 Requirements	7
6.1 General	7
6.2 Material	7
6.3 Nominal air volume flow rate	7
6.4 Pressure difference	7
6.5 Filtration performance	7
7 Test methods	8
7.1 Test rigs	8
7.2 Test conditions	8
7.3 Test aerosols	9
7.4 Survey of test procedures	9
7.4.1 General	9
7.4.2 Step 1: Testing sheet filter medium	9
7.4.3 Step 2: Leak test of the filter element	9
7.4.4 Step 3: Efficiency test of the filter element	9
7.4.5 Remarks	9
7.5 Test procedures	10
7.5.1 Testing sheet filter media	10
7.5.2 Leak test of the filter element	13
7.5.3 Efficiency test of the filter element	17
8 Assessment of the filter, documentation, test reports	19
9 Marking	19
Bibliography	20