

DIN EN 1073-1:2016-09 (E)

Protective clothing against solid airborne partic les including radioactive contamination - Part 1: Requirements and test methods for compressed air line ventilated protective clothing, protecting the body and the respiratory tract (includes Corrigendum :2016)

Contents		Page
European foreword		4
1	Scope	6
2	Normative references	6
3	Terms and definitions	7
4	Requirements	8
4.1	Design	8
4.2	Materials	8
4.3	Nominal protection factor	9
4.4	Seam strength, Joins and Assemblages	10
4.4.1	Seam strength	10
4.4.2	Detachable joins	10
4.5	Visor	10
4.6	Air supply system	10
4.7	Air flow rate	11
4.8	Air flow rate warning device	11
4.9	Supply valve	11
4.10	Exhaust devices	11
4.11	Pressure in the suit	11
4.12	Carbon dioxide content of the inhalation air	11
4.13	Noise associated with the air supply to the suit	12
4.14	Escape device or emergency breathing facility	12
4.15	Expressing of the results	12
5	Test methods	12
5.1	Test preparation	12
5.1.1	General	12
5.1.2	Visual inspection	12
5.1.3	Conditioning for storage on samples and pre-treatment for reusable suits	12
5.2	Practical performance test	13
5.2.1	General	13
5.2.2	Procedure	14
5.2.3	Information to be recorded	15
5.3	Measurement of minimum and maximum air flow rate	15
5.4	Determination of the nominal protection factor	15
5.5	Detachable joins pull test	15
5.6	Exhaust device pull test	16
5.7	Suit test fixture	16
5.8	Carbon dioxide content of inhaled air	17
5.8.1	Test equipment	17
5.8.2	Test procedure	17
5.9	Emergency breathing/escape device protection test	17
6	Marking	18

7	Information supplied by the manufacturer	18
	Annex A (normative) Material tests -- Resistance to ignition	20
	Annex B (normative) Total inward leakage test	21
B.1	Principle	21
B.2	Test subjects	21
B.3	Sodium chloride aerosol	21
B.3.1	Aerosol generator	21
B.3.2	Test agent	22
B.3.3	Detection	22
B.3.4	Flame photometer	22
B.3.5	Sample pump	22
B.3.6	Sampling of chamber concentration	22
B.4	Sampling	23
B.4.1	General	23
B.4.2	Sampling probes for the body and the challenge concentration	24
B.4.3	Sampling probe for the respiratory area	24
B.4.4	Position of sampling probes during the test	26
B.4.5	Collecting device used for a simultaneous extraction of the air from the 3 sampling probes located in the suit	26
B.4.6	Sampling lines	27
B.5	Test chamber	27
B.6	Treadmill	27
B.7	Pressure detection probe	27
B.8	Test procedure	27
B.9	Assessment of results	29
	Annex C (normative) Optical Chart	31
	Annex D (informative) Field of vision	32
D.1	Introduction	32
D.2	Proposed test procedure	32
	Annex E (informative) Environmental issues	33
	Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 89/686/EEC aimed to be covered	35
	Bibliography	37