

DIN EN 1073-1:2018-10 (E)

Protective clothing against solid airborne particles including radioactive contamination - Part 1: Requirements and test methods for compressed air line ventilated protective clothing, protecting the body and the respiratory tract (includes Amendment A1:2018)

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

7	Information supplied by the manufacturer	17
	Annex A (normative) Total inward leakage test	19
A.1	Principle	19
A.2	Test subjects	19
A.3	Sodium chloride aerosol	19
A.3.1	Aerosol generator	19
A.3.2	Test agent	19
A.3.3	Detection	19
A.3.4	Flame photometer	20
A.3.5	Sample pump	20
A.3.6	Sampling of chamber concentration	20
A.4	Sampling	21
A.4.1	General	21
A.4.2	Sampling probes for the body and the challenge concentration	21
A.4.3	Sampling probe for the respiratory area	22
A.4.4	Position of sampling probes during the test	23
A.4.5	Collecting device used for a simultaneous extraction of the air from the 3 sampling probes located in the suit	24
A.4.6	Sampling lines	24
A.5	Test chamber	24
A.6	Treadmill	25
A.7	Pressure detection probe	25
A.8	Test procedure	25
A.9	Assessment of results	26
	Annex B (normative) Optical Chart	28
	Annex C (normative)" Field of vision	29
C.1	Introduction	29
C.2	Proposed test procedure	29
	Annex D (informative) Environmental issues	30
	Annex ZA (informative) Relationship between this European Standard and the essential requirements of Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment aimed to be covered	31
	Bibliography	33