

ISO 18777:2005-02 (E)

Transportable liquid oxygen systems for medical use - Particular requirements

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	General requirements and general requirements for tests	3
5	Classification	3
6	Identification, marking and documents	3
7	Power input	8
8	Basic safety categories	8
9	Removable protective means	8
10	Environmental conditions	8
11	Not used	9
12	Not used	9
13	General	9
14	Requirements related to classification	9
15	Limitation of voltage and/or energy	9
16	Enclosures and protective covers	9
17	Separation	10
18	Protective earthing, functional earthing and potential equalization	10
19	Continuous leakage currents and patient auxiliary currents	10
20	Dielectric strength	10
21	Mechanical strength	10
22	Moving parts	10
23	Surfaces, corners and edges	10
24	Stability in normal use	10

25	Expelled parts	11
26	Vibration and noise	11
27	Pneumatic and hydraulic power	11
28	Suspended masses	11
29	X-Radiation	11
30	Alpha, beta, gamma, neutron radiation and other particle radiation	11
31	Microwave radiation	11
32	Light radiation (including lasers)	11
33	Infrared radiation	12
34	Ultraviolet energy	12
35	Acoustical energy (including ultrasonics)	12
36	Electromagnetic compatibility	12
37	Locations and basic requirements	12
38	Marking and accompanying documents	12
39	Common requirements for category AP and category APG equipment	12
40	Requirements and tests for category AP equipment, parts and components thereof	12
41	Requirements and tests for category APG equipment, parts and components thereof	12
42	Excessive temperatures	12
43	Fire prevention	13
44	Overflow, spillage, leakage, humidity, ingress of liquids, cleaning, sterilization, disinfection and compatibility	13
45	Pressure vessels and parts subject to pressure	14
46	Human errors	14
47	Electrostatic charges	15
48	Biocompatibility	15
49	Interruption of the power supply	15
50	Accuracy of operating data	15
51	Protection against hazardous output	15
52	Abnormal operation and fault conditions	15
53	Environmental tests	15
54	General	15
55	Enclosures and covers	15

56	Components and general assembly	16
57	Mains parts, components and layout	16
58	Protective earthing - Terminals and connections	16
59	Construction and layout	16
101	Additional requirements	16
	Annex AA (informative) Rationale	19
	Annex BB (informative) Environmental aspects	22
	Annex CC (informative) Index of defined terms	24
	Bibliography	25