

DIN EN ISO 11810:2016-06 (E)

Lasers and laser-related equipment - Test method and classification for the laser resistance of surgical drapes and/or patient protective covers - Primary ignition, penetration, flame spread and secondary ignition (ISO 11810:2015)

Contents	Page
European foreword	4
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 93/42/EEC	5
Foreword	6
Introduction	7
1 Scope	8
2 Normative references	8
3 Terms and definitions	8
4 Principle	10
5 Significance and use of the test	10
6 Apparatus	11
6.1 General	11
6.2 Containment box	12
6.3 Specimen holder	12
6.4 Laser system	16
6.4.1 Laser	16
6.4.2 Power meter	16
6.5 Gas supply system	16
6.6 Environment	16
6.6.1 Ambient air conditions	16
6.6.2 Oxygen enriched atmospheres	16
6.7 Smoke evacuation device	17
7 Reagents and materials	17
8 Preparation of specimens	17
8.1 Sampling	17
8.1.1 Single use products	17
8.1.2 Reusable products	17
8.2 Specimens	17
8.3 Quantities	17
8.4 Conditioning	17
9 Preparation of apparatus	18
10 Test methods	18
10.1 General conditions	18
10.2 Primary ignition and penetration	18
10.2.1 Principle	18
10.2.2 Testing procedure	21

10.3	Secondary ignition	22
10.3.1	Principle	22
10.3.2	Testing procedure	23
11	Classification	25
11.1	General	25
11.2	Laser-induced primary ignition (I)	25
11.3	Resistance to laser penetration (P)	25
11.4	Laser-induced secondary ignition (SI)	25
12	Test report	26
	Bibliography	27