

DIN EN 13138-1:2015-02 (E)

Buoyant aids for swimming instruction - Part 1: Safety requirements and test methods for buoyant aids to be worn

Contents		Page
Foreword		4
Introduction		5
1	Scope	7
2	Normative references	7
3	Terms and definitions	7
4	Classification	9
5	Safety Requirements	9
5.1	General	9
5.2	Buoyancy	10
5.2.1	Buoyancy characteristics of the complete device	10
5.2.2	Residual buoyancy	10
5.3	Design, fit and positioning	11
5.3.1	Adjustability - Class B devices	11
5.3.2	Buckles, zippers and other fixings	11
5.3.3	Retention of function	11
5.3.4	Innocuousness	12
5.4	Entire assembly and components	12
5.4.1	Integrity of the entire assembly of worn devices	12
5.4.2	Thread	13
5.4.3	Valves, stoppers and other protruding parts	13
5.5	Materials - mechanical properties	13
5.5.1	Seam strength and durability of inflatable devices	13
5.5.2	Resistance to puncturing	13
5.5.3	Resistance of foam and other inherent buoyant materials to compression	13
5.6	Materials and markings	13
5.6.1	General	13
5.6.2	Resistance to chlorinated salt water	14
5.6.3	Resistance of the markings to saliva	14
5.6.4	Resistance of the markings to perspiration	14
5.6.5	Adhesion of markings	14
6	Test methods	14
7	Warnings and markings	15
7.1	General	15
7.2	Warnings and markings on the product	15
7.3	Information supplied by the manufacturer	16
7.4	Consumer information at the point of sale	16
Annex A (normative)	Procedures for testing resistance of markings to saliva	18
Annex B (normative)	Procedures for testing efficiency of valves of inflatable devices	19
Annex C (normative)	Security of the pressure release of buckles	20

Annex D (normative) Procedures for testing adjustability, retention of function, edges, corners and points by assessment panel	21
D.1 General	21
D.2 Assessment of Risks	21
D.3 Re-assessment of instructions supplied with the device	21
Annex E (normative) Test procedures for seam strength and durability of inflatable devices	24
Annex F (normative) Test procedures for determining the puncture resistance of inflatable devices	25
Annex G (normative) Test procedures for integrity of the entire assembly	26
G.1 Test description	26
G.2 Test parameters	26
Annex H (informative) Significant changes between this document and the previous edition of Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 89/686/EEC	29
Bibliography	30