

ISO 23668:2022-11 (E)

Ships and marine technology - Marine environment protection - Continuous on-board pH monitoring method

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	pH buffer solution	2
4.1	General	2
4.2	Certified pH buffer solution	3
4.3	Practical-use pH buffer solution	3
5	Performance requirements for the combination electrode	3
5.1	General	3
5.2	Slope force	3
5.2.1	Requirement	3
5.2.2	Verification	3
5.3	Repeatability	3
5.3.1	Requirement	3
5.3.2	Verification	3
5.4	Linearity	3
5.4.1	Requirement	3
5.4.2	Verification	4
6	Interferences	4
6.1	General	4
6.2	Sample conductivity	4
6.3	Electrode fouling	4
6.4	Electrical noise	4
6.5	Air bubbles	4
7	Requirements for pH meters for continuous on-board monitoring	5
7.1	General	5
7.2	Apparatus	5
7.2.1	General	5
7.2.2	pH combination electrode	5
7.2.3	Transmitter	6
7.2.4	Electrode mounting	7
7.2.5	Cleaning device	7
7.3	Placement	7
7.4	Report	7
8	Calibration	7
9	Maintenance	8
9.1	General	8
9.2	Manual cleaning	8
9.3	Automatic cleaning	9

9.3.1	General	9
9.3.2	Ultrasonic cleaning	9
9.3.3	Mechanical cleaning	9
9.3.4	Air/water cleaning	9
9.4	Storage of the pH combination electrode	9
Bibliography		10