

# REPORT OF ANALYSIS

**Colorless pH Buffer Solution**

Product #: 160222-01-03

Matrix: H<sub>2</sub>O

Lot #: 711317937-7

Analyte	Concentration & Uncertainty
<b>pH</b>	<b>7.00 ± 0.01 pH units</b>

°C	0	5	10	15	20	25	30	35	40	50
pH	7.12	7.09	7.06	7.04	7.02	7.00	6.99	6.98	6.98	6.97

**Intended Use:** This Reference Material (RM) is intended for use as a calibration standard for the quantitative determination of pH. The above certified value for pH is certified to ± 0.01 pH units at 25°C only. Other pH values at their corresponding temperatures are accurate to ± 0.05.

**Certification & Traceability:** This RM was manufactured under a quality management system that is accredited to ISO 9001, ISO 17034 and ISO/IEC 17025. This RM was manufactured using purified starting materials and 18 Megohm-cm double deionized water. The balances used in the preparation of this RM are calibrated regularly with traceability to NIST. All volumetric dilutions are performed in Class A calibrated glassware. Thermometers are calibrated against a NIST-traceable thermometer in accordance with NIST Special Publication 819. The value reported for the analyte is based upon analytical measurements made during the preparation of the RM. The value was determined in an ISO 17025 accredited laboratory using an appropriate analytical technique. The uncertainty associated with the reported value represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

**Instructions for Use:** We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the RM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original RM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

**Period of Validity:** O2Si ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.



**Chuck Goudreau, Certifying Officer**

March 31, 2021  
**Certification Date**

O2Si waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.