

The International Recognized Calibration Standard for Salinometers



An example of the bottling and the labeling found on a standard bottle of P35 Seawater.

The International Association for Physical Sciences of the Ocean (IAPSO) Standard Seawater manufactured by Ocean Scientific International (OSIL) is available in North America from Guildline Instruments.

The Seawater is used to standardize **Guildline's Autosal®** and **Portasal®** Salinometers, and for the calibration of other salinity measuring instruments.

IAPSO STANDARD SEAWATER IS AVAILABLE IN HIGH QUALITY, GLASS BOTTLES, EACH CONTAINING 200 ML OF NATURAL SEAWATER. THE BOTTLE LABEL CARRIES INFORMATION ON ITS CONDUCTIVITY RATIO (K15) AND SALINITY ACCORDING TO THE PRACTICAL SALINITY SCALE 1978 (PSS78).

IAPSO Standard Seawater is the only conductivity/salinity transfer standard for Practical Salinity that is recognized by all the major oceanographic institutes around the world.

The Standards, which have a precisely known electrical conductivity ratio, are used for the calibration of salinity measurement devices.

For over 100 years the comparability of salinity data world-wide has depended on the widespread use of this standard, IAPSO Standard Seawater, for calibrating laboratory and in situ instruments.

The bottle is made from pharmaceutical-grade glass, which minimizes any contamination to the seawater and thereby increases the shelf-life of the product. The bottle's narrow neck is sealed with a halobutyl, polymer-coated seal, providing a totally impervious barrier to evaporation. A secure, tamper-evident seal is made with color-coded alloy crimp-cap.

We recommend that for high accuracy work, the Standards have a minimum shelf life of 2 years. For further information, please refer to Culkin, F. and Ridout, P.S. (1998), 'Stability of IAPSO Standard Seawater', *J. Atmos. & Oceanic Tech.*, 15, 1072-1075.

Please note that in the US, Guildline Instruments is the exclusive distributor of IAPSO Standard Seawater and all other Seawater products that are sold from OSIL.

Available Salinity Standards

P-Series

Normal Standard Seawater, (S=35) is accurately calibrated in electrical conductivity ratio (K15) and in salinity. This is the main single-point calibration standard for salinity measurement.

10L-Series

Low Salinity Standard Seawater, (S=10) is accurately calibrated in conductivity ratio for the temperature range 15 °C to 30 °C. This standard provides an additional calibration point for low salinity work, e.g. Baltic Sea.

30L-Series

Low Salinity Standard Seawater, (S=30) is accurately calibrated in conductivity ratio for the temperature range 15 °C to 30 °C. This standard is used in conjunction with P-Series to determine instrument offset and linearity at lower salinities.

38H-Series

High Salinity Standard Seawater, (S=38) is accurately calibrated in conductivity ratio for the temperature range 15 °C to 30 °C. The standard is used in conjunction with P-Series to determine instrument offset and linearity at higher salinities, e.g. Mediterranean Sea.

Linearity Pack

When analyzing samples at salinities away from 35, it is important to know the accuracy of the salinometer's offset across the working range to improve data quality. Developed to enable the linearity of instruments to be checked more easily, this pack contains: 4 x P-Series, 2 x 38H-Series, 2 x 30L-Series and 2 x 10L-Series, complete with full instructions.

Ordering Information

Standard Seawater is sold in a variety of packages and configurations. For more information, please contact Guildline Instruments directly at (800) 310-8104 (ext 104) or (613) 283-3000 (ext 104).

For US customers, Standard Seawater is shipped direct from Guildline's authorized New York located warehouse. This means that there is no customs or duty for the user. User simply pays for shipping from this US location.

Please note that when ordering Seawater, it is the user's responsibility for shipping and any shipping damages.