



Sea-Bird Electronics, Inc.
13431 NE 20th Street
Bellevue, WA 98005
USA

Phone: (425) 643-9866
Fax: (425) 643-9954
E-mail: seabird@seabird.com
Web: www.seabird.com

APPLICATION NOTE NO. 53

January 1999

INSTRUCTIONS FOR STORAGE AND USE OF SBE BAY MODEL SENSORS

The conductivity sensors have been shipped dry (i.e., with no water in the cells), and with the barbed fittings at either end of the instrument capped with silicon nipples. The purpose of the nipples is to keep the interior of the cell free from air-borne contaminants. The following procedure should be followed prior to and after a period of acquisition:

1) Shortly before use, rinse the interior of the cell with a solution of 1% Triton X-100 in distilled water. Triton X-100 is a non-ionic detergent, so that residual detergent remaining in the cell when use is begun will have minimal effect on the accuracy of conductivity measurements. There is a small bottle of Triton X-100 included with this shipment. The Triton should be diluted with distilled water such as is readily available in grocery stores.

Rinsing with the detergent solution will ensure that the porous platinized surfaces of the electrodes will be thoroughly "wetted" prior to use. If use is begun with dry electrodes, it may take several hours or longer before accurate conductivity readings will be obtained.

2) After a period of use, if further use is not anticipated for some time, rinse the interior of the cells with clean fresh (or distilled) water to remove or dilute any salt water which is within the porous platinized surfaces of the electrodes.

3) Before storage, drain any remaining water from the cells and cap the barbed fittings with the silicon nipples.

Triton X-100 (a trade name of J.T. Baker, Inc) is a concentrated liquid non-ionic detergent available at most chemical or scientific supply stores. Other liquid detergents can probably also be used, but scientific grades are preferable because of their known composition. It is better to use non-ionic detergent since conductivity readings taken immediately after use are less likely to be affected by any residual detergent left in the cell.