

SO_DYFAMED Time Series - 1991-> ...

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METHOD

Dissolved oxygen by the Winkler procedure

The analysis technique of dissolved Oxygen is the standard Winkler titration using an automated titrator, in the conditions given by Murray and Riley (1969). Bottles used are BOD Wheaton 60ml. Manganous chloride and potassium iodide-sodium hydroxide are added to the seawater sample immediately after sampling. Samples are acidified at the time of analysis which is realised generally within 24 hours and occasionally in the 3 or 4 days after sampling.

The analysis is realised directly in the sample bottle which is pre calibrated. The computer driven system delivers thiosulphate 0.01 N (calibrated with a 0.01 N potassium-iodide solution), the endpoint being determined by the potential change between two identical platinum electrodes. Following Murray and Riley, the reagent blank is estimated to 0.01 mlO₂/l.

Murray C.N. and J.P. Riley (1969) The solubility of gases in distilled water and sea water- II. Oxygen. Deep-Sea Research, 16, 311-320.