

AOX 3

Adsorbable organically bound halogens

sensitive range / high COD contents

Test 0-072



Tube test

Method:

AOX determination is carried out in 3 steps:

1. Solid phase extraction with **NANOSORB** for AOX
2. Decomposition of the concentrated adsorber medium
3. Determination as chloride with reagent set **NANOCOLOR**[®] AOX 3

Ranges:

0.1–3.0 mg/L AOX

0.01–0.30 mg/L AOX

Method

0071

0072

NANOCOLOR[®]

reagent set:

AOX 3 (REF 985 007) and Supplement kit for AOX (REF 918 072)

Wavelength:

470 nm

Interferences:

COD > 1000 mg/L interferes if the sample volume is 100 mL.

COD > 100 mg/L interferes if the sample volume is 1 litre.

When using 200 mL of rinsing solution, this method is also suitable for analysing sea water.

Procedure:

Requisite accessories: starter kit for AOX (REF 916 111), piston pipette with tips, CHROMAFIL[®] membrane filters (REF 916 50) or folded filters MN 619 de ¼ (REF 539 011), optional: pump set for AOX (REF 916 115)

1a. Manual extraction

Connect a **NANOSORB** cartridge to the syringe 50 mL with the aid of an adaptor. Pour

- 100 mL** test sample (*the pH value of the sample must be between pH 3 and 5*) into a glass beaker 150 mL, dip the **NANOSORB** cartridge into the test sample and lift the syringe plunger up and down 20 times to adsorb the organically bound halogens from the sample (accessories: stand with clamp and boss).

After extraction disconnect the **NANOSORB** cartridge from the adaptor and syringe. Rinse the **NANOSORB** cartridge slowly in 4–5 portions with a total of

- 100 mL AOX 3 R1** rinsing solution in order to remove inorganic chloride. Connect the syringe to the cartridge once more and blow out any excess of water from the **NANOSORB** adsorber with 2 strong draughts of air.

1b. Extraction using the pump set

Close valve of the flask. Pour

- 100 mL** test sample (*the pH value of the sample must be between pH 3 and 5*) or for the sensitive range
- 1000 mL** test sample (*the pH value of the sample must be between pH 3 and 5*) into the flask and connect a **NANOSORB** cartridge to the flask using the adaptor. Open valve and start pumping for 20 min to adsorb the organically bound halogens from the sample.

After extraction disconnect the **NANOSORB** cartridge from the adaptor and flask. Rinse the **NANOSORB** cartridge slowly in 4–5 portions with a total of

- 100 mL AOX 3 R1** rinsing solution in order to remove inorganic chloride. Connect the syringe to the cartridge using the adaptor and blow out any excess of water from the **NANOSORB** adsorber with 2 strong draughts of air.

