

AOX 3

Adsorbable organically bound halogens

(continued)

Test 0-072



2a. Decomposition if COD content is high, using a heating block

Add into a reaction tube 14 mm ID

- 1 **NANOFIX AOX 3 R2**,
- 1 **black spoon AOX 3 R5** and
- 5 **mL AOX 3 R3**, close and mix.

Open and insert the **NANOSORB** to this solution with the help of a funnel, then press it down to the bottom of the tube using tweezers. Close the tube, place it into the heating block and heat at 120 °C for 30 min. Remove tube from heating block, shake gently and leave it to cool.

Open tube, add

- 3.5 **mL AOX 3 R4** and
- 1 **orange spoon AOX 3 R6** (*the solution becomes turbid*), close and mix. Filter the solution with membrane or folded filters.

2b. Decomposition if COD content is high, using a microwave

Add to the decomposition vessel

- 1 **NANOFIX AOX 3 R2**,
- 1 **black spoon AOX 3 R5** and
- 5 **mL AOX 3 R3**, close and mix.

Open and add the **NANOSORB** to this solution using tweezers. Add a glass rod to the vessel to prevent the **NANOSORB** from swimming on the surface. Close the decomposition vessel. Place it on the outer edge of the microwave revolving plate and heat 23 s at 900 VA or 28 s at 750 VA (*always use the highest power rating of your microwave oven*). Remove the vessel from the microwave and let it cool for about 10 min. Turn the pressure vessel upside down once and open it with caution. Add

- 3.5 **mL AOX 3 R4** and
- 1 **orange spoon AOX 3 R6** (*the solution becomes turbid*), close and mix. Filter the solution with membrane or folded filters.

3. Determination of AOX

Open test tube AOX, add

- 4.0 **mL** decomposition solution (*let particles of adsorbent deposit or use membrane filters*). Add
- 1.0 **mL Chloride R2**, close and mix.

Clean outside of test tube and measure after 3 min.

Reference:

German standard methods for the examination of water, waste water and sludge (DIN EN 1485 H14 and DIN 38409 H22)