# Test 1-85 12.18

NANOCOLOR® Ozone



## Method:

Photometric determination with indigo trisulfonate

Range ( <b>mg/L O</b> <sub>3</sub> ):	50 mm 0.01–1.00	10 mm 0.10–1.50	Test tube 0.05-1.50
Wavelength (HW = 5–12 nm):	600 nm		
Reaction time:	0 min		
Reaction temperature:	20–25 °C		

## Contents of reagent set:

2 x NANOFIX Ozone R0 (for preparation of reagent R1 see preparation)

2 x 100 mL Ozone R1

2 x 100 mL Ozone R2

## **Hazard warning:**

Reagent R0 contains potassium indigotrisulfonate 20–100 %. Reagent R2 contains malonic acid 10–20 %.

For further information ask for a safety data sheet.

#### Interferences:

Chlorine dioxide and permanganate cause interferences. The following quantities of ions will not interfere:  $Cl_2 < 3$  mg/L,  $H_2O_2$ ,  $ClO_3^-$  and  $ClO_4^-$ .

The method can also be applied for the analysis of sea water.

#### Notes:

- For a good reproducibility we recommend uninterrupted speedy work during sampling. To avoid the loss of ozone, use glass instead of plastic.
- The reagents can be used also for the evaluation with photometers PF-12/PF-12<sup>Plus</sup>.

#### Procedure:

Requisite accessories: volumetric flasks 25 mL, piston pipette with tips, glass pipette, reaction tubes 16 mm OD (REF 91680)

### Preparation

Before first use, add 1 *NANOFIX* (reagent R0) to one of the two bottles of R1 and shake for 30 s. The resulting solution can then be stored for 4 months. Prepare the second bottle only after consumption or expiry of this solution.

Pour into two separate volumetric flasks:

10 mm/Test tube		
Test sample	Blank value	
1 mL R1 (see preparation) 1 mL R2, mix 20 mL test sample (the pH value of the sample must be between pH 1 and 12), mix immediately	1 mL R1 1 mL R2, mix 20 mL distilled water	

50 mm		
Test sample	Blank value	
0.5 mL R1 (see preparation) 1 mL R2, mix 20 mL test sample (the pH value of the sample must be between pH 1 and 12), mix immediately	0.5 mL R1 1 mL R2, mix 20 mL distilled water	

Fill up sample and blank value to 25 mL mark with distilled water and mix again. Immediately pour into cuvettes and measure.

#### Measurement:

For *NANOCOLOR*® photometers see manual, test 1-85.

For PF-12 Plus/PF-12 see manual, test 5-85.

## Photometers of other manufacturers:

Verify factor for each type of instrument by measuring standard solutions.

## Storage:

Store test kit in a cool (< 8 °C) and dry place.

## Disposal:

The contents of cuvettes and flasks can be washed into drain with plenty of water.

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