

REF 91875

Test 1-75

11.22

NANOCOLOR® Phenol**Method:**

Photometric determination with diazotized 4-nitroaniline

Cuvette:	50 mm	20 mm	10 mm
Range (mg/L phenol):	0.01 – 1.00	0.05 – 3.50	0.1 – 7.0
Wavelength (HW = 5 – 12 nm):	470 nm		
Reaction time:	5 min (300 s)		
Reaction temperature:	20 – 25 °C		

Contents of reagent set:

2 × 100 mL Phenol R1
 22 g Phenol R2
 2 × 100 mL Phenol R3
 1 measuring spoon 85 mm

Hazard warning:

Information regarding safety can be found on the box' label and in the safety data sheet.
 You can download the SDS from www.mn-net.com/SDS.

Interferences:

Apart from phenol, most other phenol derivatives are also determined (sometimes with different colorations). 4-Nitrophenol is not detected. In case of water, which is heavily contaminated with organic compounds, the phenols should first be separated by steam distillation.

The method can also be applied for the analysis of sea water after dilution (1 + 9).

Procedure:

Requisite accessories: volumetric flasks 25 mL, piston pipette with tips

Pour into two separate volumetric flasks 25 mL:

Test sample	Blank value
1 mL R1 a small amount of R2, until solution is colourless	1 mL R1 a small amount of R2, until solution is colorless
20 mL test sample (<i>the pH value of the sample must be at pH 7</i>), mix	20 mL distilled water, mix
1 mL R3, mix	1 mL R3, mix

Fill up sample and blank value to 25 mL mark with distilled water and mix again. After 5 min pour into cuvettes and measure.

Measurement:

For MACHEREY-NAGEL photometers see manual, test 1-75.

Measurement when samples are colored or turbid:

For all MACHEREY-NAGEL photometers see manual, use key for correction value.

Photometers of other manufacturers:

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

Decreasing volume of analytical preparation:

In order to increase the number of determinations, you can work with volumetric flasks of 10 mL: 0.4 mL R1 + a small amount of R2 + 8 mL test sample + 0.4 mL R3, semi-micro cuvette (REF 91950).

Disposal:

Information regarding disposal can be found in the safety data sheet. You can download the SDS from www.mn-net.com/SDS.

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