REF 985859 Test 8-59 09.18 *NANOCOLOR*[®] Methanol 15

Method:

Conversion of methanol via catalytic oxidation using the enzyme alcohol oxidase. The hydrogen peroxide formed by this reaction is determined photometrically using the enzyme peroxidase and a specific indicator.

Range:	0.2–15.0 mg/L MeOH
Wavelength (HW = 5–12 nm):	620 nm
Reaction time:	30 + 10 min
Reaction temperature:	25 °C

Contents of reagent set:

23 test tubes Methanol 15 R0 1 flask with 90 mL Methanol 15 R1

- 1 flask with 6 mL Methanol 15 R2
- 1 flask with 10 mL Methanol 15 R3

Hazard warning:

This test does not contain any harmful substances which must be specially labelled as hazardous.

Interferences:

2-Propanol and glycerine do not interfere.

Strong oxidizing agents, formaldehyde and lower primary alcohols like ethanol, propanol and butanol may lead to false, excessively high results.

Preparation of samples:

Turbid samples must be filtered before analysis (*NANOCOLOR*[®] Membrane Filtration Set, REF 91650).

Procedure:

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Requisite accessories: piston pipette with tips, water bath or incubator (REF 951001)

<u>Remark:</u> Remove only as many test tubes with freeze-dried reagent R0 as are required from the freezer <u>immediately</u> before use!

Open test tube, add

3.0 mL R1 and

1.5 mL sample (the pH value of the sample must be between pH 6 and 8) close and mix. Incubate in a water bath or incubator exactly for 30 min at 25 °C.* Open test tube, add

100 uL R2. close and mix.

Wait **1 min**.

Open test tube, add

- 2 drops R3, close and mix.
- Clean outside of test tube and measure after 10 min.

* An incubation is also possible at room temperature. But depending on the temperature, variations in the obtained results are then to be expected.

Measurement:

For MACHEREY-NAGEL photometers see manual, test 8-59.

Measurement when samples are colored or turbid:

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

Photometers of other manufacturers:

For other photometers check whether measurement of round glass tubes is possible. Verify factor for each type of instrument by measuring standard solutions.

Storage:

Box A of the tube test must be **stored icy-cold at < 0** °C! **Box B** is to be stored in a refrigerator **at +2** °C **to +8** °C. Please pay attention to the expiry date. The reagents R1 to R3 must be adjusted to room temperature prior to carrying out analysis. We recommend removing Box B containing the additive reagents from the refrigerator in good time prior to use. Gently mix reagent R1 before use.