MACHEREY-NAGEL PF-3 COD and NANOCOLOR<sup>®</sup>





# The perfect team for COD analysis

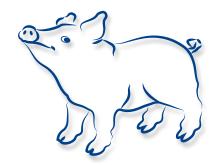
- Compact photometer with intuitive menu guidance
- Tough and water-proof according to IP 68
- Mobile use right at the point of interest
- more than 9 different measuring ranges with just one instrument

Water Analysis

## Reliable COD analysis

COD levels play a major role in assessing communal and industrial waste water. As a sum parameter indicating the organic load of waste water, COD is one of the most important parameters in waste water analysis. Among others, COD values are used to calculate and monitor the purification capacities of waste water plants. The PF-3 COD together with the user friendly NANOCOLOR® tests is ideally suited to obtain information on the COD content (2-60000 mg/L) easily and directly at the place of sampling.





# Small and compact Handy and light weight ■ Glass-fiber reinforced housing Water proof according to IP 68 Shock-resistant optics Ideal for all your analysis needs in the lab and right at the point of interest ACHEREY-NAGEL (MN) Easy and convenient Fully developed menu structure using just 4 buttons Optional storage for just one O-measurement Results in different units Open cuvette slot Safe results and convenient operation Smart and clever Runs on standard or rechargeable batteries Free of charge data export software Add new tests and parameters anytime

Power supply and data transfer via USB port Flexible use and easy data administration

## Technical data compact photometer PF-3 COD

| Туре:                | LED photometer with 3 interference filters   |
|----------------------|--|
| Wavelengths:         | 365 nm, 450 nm, 595 nm   |
| Wavelength accuracy: | ± 2 nm, bandwidth at half transmission 10–12 nm  |
| Measuring modes:     | Pre-programmed MN-tests  |
| Cuvette holder:      | Tubes 16 mm OD   |
| Memory:              | 50 results   |
| Display:             | Backlit graphic display, 64 x 128 pix, all important data at a glance: results with unit, date, time |
| Operation:           | Self-explanatory menu guidance, foil keypad, test selection via parameter lists                      |
| Power supply:        | 3 AA batteries, rechargeable batteries, USB interface; optional internal accu-pack                   |
| Housing:             | Water proof, IP 68 certified   |
| Dimensions:          | 170 x 95 x 68 mm   |

CE This device complies with the following directives: EMC Directive 2014-30-EU; LVD Directive 2014-35-EU

# NANOCOLOR<sup>®</sup> benefits at a glance

### Reliable and accurate

- Intuitive handling and high measurement accuracy
- Simple chemical-analytical methods
- Reaction principles based on international standards (DIN, EN, ISO)
- Low interference susceptibility ensures safe results

High measurement safety for reliable water analysis

#### Precise and versatile

- Pre-dosed tubes for quick and easy measurements
- Reaction and detection in the same tube
- No direct contact with chemicals
- Ideal for routine analytics and self-monitoring
- Especially high accuracy due to pre-dosed reagents

#### Fair and economical

- Individual combination of reagent bundles
- Free of charge seminars and product training
- Competent customer service by highly educated and experienced professionals
- Replacement instruments immediately available in case of repairs
- Consistently fair concept with impressive price-performance ratio

# NANOCOLOR<sup>®</sup> tests running on the PF-3 COD

| NANOCOLOR® t | est       | Measurement range             | Test number | No. of tests | REF     |
|--------------|-----------|-------------------------------|-------------|--------------|---------|
| COD 40*      | ISO 15705 | 2–40 mg/L O <sub>2</sub>      | 0–27        | 20           | 985 027 |
| COD 60*      | ISO 15705 | 5–60 mg/L O <sub>2</sub>      | 0–22        | 20           | 985 022 |
| COD 160*     | ISO 15705 | 15–160 mg/L O <sub>2</sub>    | 0–26        | 20           | 985 026 |
| COD 600*     | ISO 15705 | 50–600 mg/L O <sub>2</sub>    | 0–30        | 20           | 985 030 |
| COD 1500*    | ISO 15705 | 100–1500 mg/L O <sub>2</sub>  | 0–29        | 20           | 985 029 |
| COD 4000*    |           | 400–4000 mg/L O <sub>2</sub>  | 0–11        | 20           | 985 011 |
| COD 10000*   |           | 1.00–10.00 g/L O <sub>2</sub> | 0–23        | 20           | 985 023 |
| COD 15000*   |           | 1.0–15.0 g/L O <sub>2</sub>   | 0–28        | 20           | 985 028 |
| COD 60000*   |           | 5.0-60.0 g/L O <sub>2</sub>   | 0–12        | 20           | 985 012 |
| COD LR 150   | ISO 15705 | 3–150 mg/L O <sub>2</sub>     | 0–36        | 20           | 985 036 |
| COD HR 1500  | ISO 15705 | 20–1500 mg/L O <sub>2</sub>   | 0–38        | 20           | 985 038 |

\* These products contain harmful substances which must be specially labeled as hazardous. For detailled information please see MSDS









## NANOCOLOR® analysis case

To ensure maximum flexibility, MACHEREY-NAGEL offers practical case solutions for a wide variety of applications. These mini labs in tough cases with premium foam inlays are available with or without photometer and can be equipped with different tests for individual needs.

The NANOCOLOR<sup>®</sup> reagent case with compact photometer PF-3 COD is especially designed for quick COD analysis right at the point of interest. It can be equipped with all the tools that are necessary for your work (heating block, pipettes, etc.). Additionally, up to three NANOCOLOR<sup>®</sup> COD boxes can be stowed within the case.

The COD tests can be run by chemically inexperienced layman safely, quickly and easily. Furthermore, the  $NANOCOLOR^{\$}$  COD tests COD 160, COD 600 and COD 1500 conform to the ISO 15705 norms in all areas.



(Example above: fully assembled NANOCOLOR® analysis case. REF 919 212)

# Ordering information

| Description  | REF     |
|--|---------|
| Compact photometer PF-3 COD, in a box, incl. manual, batteries and certificate   | 919 342 |
| Compact photometer PF-3 COD, in a case with foam inlay, incl. manual, batteries and certificate  | 934 302 |
| NANOCOLOR® analysis case with compact photometer PF-3 COD,<br>with additional space for 1 heating block NANOCOLOR® VARIO C2, 2 pipettes, 3 NANOCOLOR® tube tests and accessories | 919 212 |

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For more information please visit www.mn-net.com/PF-3.

MACHEREY-NAGEL GmbH & Co. KG · Neumann-Neander-Str. 6–8 · 52355 Düren · Deutschland



