

# Chloridmeter

Advantages of Gonotec CM20 chloride meter:

Minimum sample volumes

Perfect for determination of sweat samples

Simple operation and handling

Automatic measuring

Fast operational readiness

IVD-control standard in OPC-ampoules



### **Special Application - Cystic Fibrosis**

- Only small amounts of sweat are needed
- Ready-to-use electrolyte (acid buffer and stabilization additive); complies with IVD
- Required electrolyte replacement is indicated
- Required electrode cleaning is indicated (frequent source of error)
- Reference solution 100mmol/l; complies with IVD
- GMP-compliant (Rili-Bäk, MPG) qualification and validation in hospitals and cystic fibrosis clinics

# **Other Applications**

The system is used both in medical laboratory diagnostics and in industry.

- Chloride determination in serum, urine, sweat or other body fluids
- Examination of food products for quality control purposes
- Water analysis of service water and wastewater
- Agricultural and ecological examinations for determination of salt content in soils
- Building material analysis in the production of cement and plaster
- Quality control in the chemical industry, e.g. in the production of fixing and developing baths
- Production control in the preparation of antibiotics and other pharmaceutical products
- Examination of the salt content of drilling muds in the mineral oil industry

#### **Automated Measurement Process**

The measurement principle is based on coulometric impulse titration as an absolute measurement method. Through automated sample recognition, the measurement proceeds fully automatically after the sample is inserted without the need for manual confirmation by the user.

The end of the titration is determined by the measurement electrodes, which permanently determine the conductivity of the solution. This allows the CM20 chloride meter to be operated quickly and easily without the need for many years of experience in the classic chloride determination method. If the chloride ion concentration is very low, it is possible to raise the concentration using the standard solution.

# **Simple Handling and Documentation**

- The CM20 chloride meter can be controlled easily and comfortably via a touch screen display.
- The results are sent to the optional built-in printer in document-ready format.
- A PC for data transfer can be connected via USB or RS232.
- The last results remain available for reading even after automatic switching to stand-by mode.
- The robust design of the measurement equipment makes the CM20 chloride meter easy to handle and maintain.
- Through the use of microprocessor controls, the user does not need to correct the factoryside calibration.

# **Specifications**

#### **Standard Equipment**

Sample volume 20 μl

Duration of measurement Approx. 20 seconds

Reproducibility  $\pm$  2 digits (20  $\mu$ l) at 100 mmol/l

Measurement display 0 - 999 mmol/l Measurement range 10 - 999 mmol/l

Resolution 1 mmol/l over the entire measurement

range

Integrated stirring Magnetic stir bar PTFE, cylindrical

Ambient temperature 10-35 °C

Power source 220 V (± 30V), 50/60 Hz, 40 VA, special

models 110V, 100V

Dimensions 220 x 205 x 360 mm (L x W x H)

Weight Approx. 5.7 kg

**D** Option

Printer Graphical dot matrix printer, date,

time and sample information on each

measurement

Digits ≥ 16 characters per row

Paper Normal paper, 43 mm wide
Print modes Single printing, batch printing

Error reporting Printed in plain text

## **COM Option**

Digital data interface 2 x RS232, 1 x USB

#### **BC Option**

Connection of a barcode reader for reading data

#### 10µl Option

Sample volume 10 μl

Clinical measuring range 10 - 160 mmol/l

Reproducibility ± 1 digits (10 µl) at 100 mmol/l cf/CV of 1.02% at 100 mmol/l

Technical data subject to change without notice.



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