# titramax VT **CHLORIDE**

## Determination of chlorides in water and extracts

## Product description

The **Titramax VT CHLORIDE** can be used to determine the chloride concentration in water samples and water-soluble components from solids and organic mixtures. The method is suitable for contents from 0.001 % to 100 %. In foodstuffs the contents are very high, in natural waters or petroleum very low.

The titrator fulfils, among others, the requirements of the standards ASTM C1218, D 4458-15, D 4929-22, D 6470-99; DIN EN 196-2; ISO 5810, 5943, 6227, 9197-1; UOP 456-80.

The measurement uses a volumetric titration method with silver nitrate solution (0.001 - 0.1 mol/L).

The sample is dosed into the reagent of water and nitric acid, then the precipitation titration with silver nitrate starts. The user has to enter the sample weight into the menu. The titration speed is precisely adjusted to the reaction rate by control algorithms.

The titration is performed automatically until the endpoint indication of measurement. At the end of the measurement, the result is displayed in mg/l, but can also be displayed in other units.



Titramax VT CHLORIDE

## **Applications**

Typical applications are in the field of water and wastewater monitoring as well as food and drug control. But applications in organic materials, such as salts in petroleum or building materials, can also be determined precisely with the titrator. This requires additional extraction steps according to the respective standardised method. The instrument is suitable for analysis of

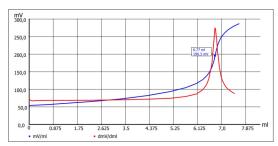
- · drinking water, surface water, seawater
- technical water such as boiler water, cooling water
- extracts from foodstuffs, medicinal substances, plants and technical products
- extracts from petroleum and petroleum products) method available on request
- chloride, bromide, iodide as simultaneous titration method available on request



AgCI-electrode and titration tip in sample solution

## Advantages

- Complete measuring station for the desired parameter (without extraction)
- Fully-automatic volumetric titration
- Precise adjustment of the titration parameters by control algorithms
- Preset measurement method allows an immediate start
- · The result output can be adjusted to your needs by using a formula generator



Titration graph of a sample

### **Features**

#### The Titramax VT CHLORIDE consists of

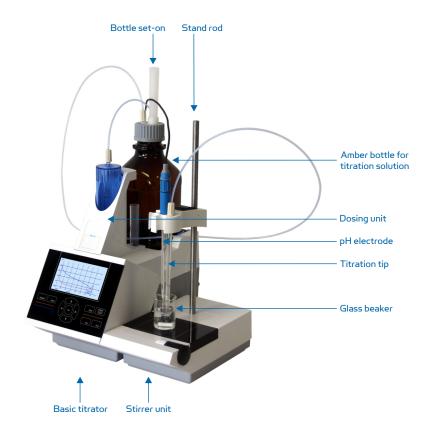
- an automatic volumetric titrator with potentiometric silver indication,
- a titration vessel with stirrer unit.

#### The analysis is based on

- · a precipitation titration in an aqueous medium,
- a precise indication by a selective electrode, which is stable over long periods.

#### Steps of the analysis are

- 1. Calibration of the electrode
- 2. Standardization of the titration solution
- 3. Titration of water samples



## Technical specifications

Measurement method:

Type of result:

Measuring range / Display resolution: Accuracy pH / mV (without sensor):

Measurement range µA: Display resolution µA: Accuracy µA (without sensor):

Measurement range temperature °C: Amplifier input impedance:

Burette resolution:

Dosing accuracy according DIN EN ISO 8655, part 3:

Filling time:

Power supply:

Power input:

Stirrer connection:

Dimensions:

Weight:

Volumetric titration

Unit selectable, e. g. %, mg/L, mg/kg, Formelgenerator verfügbar

pH: 1 ... 14; mV: - 2000 ... 2000 / pH: 0.001; mV: 0,1

 $0.002/0.1\,\text{mV}\pm1\,\text{digit}$ 

0 ... 100 0.1

0.2 ± 1 digit - 75 ... 175

 $> 1 \cdot 10^{13}$  ohms

10,000 steps for 10 mL / 20 mL  $\pm$  0.15 %

Accuracy 0.15 % / Precision 0.05 - 0.07 % (depending on the used

exchange unit)

20 sec

External plug-in power supply 100 - 240 V, 50/60 Hz

30 VA

12 V DC out, 500 mA

 $30 \times 45 \times 30$  cm (W x H x D), height with exchange unit Approx. 3.5 kg (with exchange unit and empty reagent bottle)

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