$\mathrm{K}_{\mathrm{s} 4,3} \mathrm{~T}$M20
0.1 - $4 \mathrm{mmol} / \mathrm{L} \mathrm{K}_{\mathrm{s} 4,3}$ ..... S:4.3
Acid / Indicator

## Instrument specific information

The test can be performed on the following devices. In addition, the required cuvette and the absorption range of the photometer are indicated.

| Instrument Type | Cuvette | $\boldsymbol{\lambda}$ | Measuring Range |
| :--- | :--- | :--- | :--- |
| MD 200, MD 600, MD 610, | $\varnothing 24 \mathrm{~mm}$ | 610 nm | $0.1-4 \mathrm{mmol}^{\prime} / \mathrm{L} \mathrm{K}_{54.3}$ |
| MD 640, MultiDirect, PM 620, <br> PM 630 |  |  |  |
| SpectroDirect, XD 7000, XD <br> 7500 | $\varnothing 24 \mathrm{~mm}$ | 615 nm | $0.1-4 \mathrm{mmol} / \mathrm{L} \mathrm{K}_{54.3}$ |

## Material

Required material (partly optional):

| Reagents | Packaging Unit | Part Number |
| :--- | :--- | :--- |
| Alka-M-Photometer | Tablet / 100 | 513210 BT |
| Alka-M-Photometer | Tablet / 250 | 513211 BT |

## Application List

- Waste Water Treatment
- Drinking Water Treatment
- Raw Water Treatment


## Notes

1. The terms Alkalinity-m, m-Value, total alkalinity and Acid demand to $\mathrm{K}_{\mathrm{s} 4.3}$ are identical.
2. For accurate results, exactly 10 ml of water sample must be used for the test.

## Determination of Acid capacity $\mathrm{K}_{54.3}$ with Tablet

Select the method on the device.
For this method, a ZERO measurement does not have to be carried out every time on the following devices: XD 7000, XD 7500


Fill 24 mm vial with 10 mL Close vial(s).
sample.


Press the ZERO button.
Remove the vial from the sample chamber.

For devices that require no ZERO measurement, start here.



The result in Acid Capacity $\mathrm{K}_{\mathrm{s} 4.3}$ appears on the display.

## Chemical Method

Acid / Indicator

## Appendix

## Calibration function for 3rd-party photometers

Conc. $=\mathrm{a}+\mathrm{b} \cdot \mathrm{Abs}+\mathrm{c} \cdot \mathrm{Abs}^{2}+\mathrm{d} \cdot \mathrm{Abs}^{3}+\mathrm{e} \cdot \mathrm{Abs}^{4}+\mathrm{f} \cdot \mathrm{Abs}^{5}$

|  | $\boldsymbol{\varnothing} \mathbf{2 4 ~ m m}$ | $\square \mathbf{1 0 ~ m m}$ |
| :--- | :--- | :--- |
| a | $-6.4527 \cdot 10^{-1}$ | $-6.4527 \cdot 10^{-1}$ |
| b | $6.15265 \cdot 10^{+0}$ | $1.32282 \cdot 10^{+1}$ |
| c | $-4.02416 \cdot 10^{+0}$ | $-1.86017 \cdot 10^{+1}$ |
| d | $1.42949 \cdot 10^{+0}$ | $1.42068 \cdot 10^{+1}$ |
| e |  |  |
| f |  |  |

Derived from
DIN 38409 - H 7-2

