

## Contents:

- |  |                                 |
|--|---------------------------------|
| 1 Aluminium container with 100 test sticks |                                 |
| 1 Bottle Cyanide-1                         | 1 Measuring tube with 5 ml mark |
| 1 Bottle Cyanide-2                         | 1 Small measuring spoon         |

## Safety precautions:

Keep out of reach of children. When performing the test, do not eat, drink or smoke. When you have finished the test, flush the sample with plenty of water in a place, where contact with food or dishes is not possible.

## Method of application:

1. Rinse measuring tube with the sample and fill to the 5 ml mark.
2. Measure pH value (e.g. with pH-Fix 0-14 Cat. No. 921 10).
3. If the pH is  $>10$ , add dropwise diluted sulphuric acid, until the pH is 6-7.
4. Add one measuring spoon Cyanide-1 (buffer mixture) and shake carefully.
5. Remove only as many test sticks as are required, and reseal the container immediately after use.
6. Add 5 drops Cyanide-2 to the sample solution and shake carefully.
7. **Immediately** place test stick into the sample solution.
8. After 45 seconds remove test stick and **within** 10 seconds compare with the colour scale.

## Interferences:

Only free cyanides, and cyano complexes which can be decomposed with chlorine, are covered by this test. Thiocyanates ( $\text{SCN}^-$ ) above 1 mg/l show a similar coloration. Iodide and bromide above 5 mg/l cause a decrease in colour intensity or – in higher concentrations – even inhibit the colour formation. Sulphide ions ( $\text{S}^{2-}$ ) up to 20 mg/l do not interfere. Higher concentrations also decrease or inhibit the colour formation.

If the pH is  $>10$ , then the capacity of the buffer (Cyanide-1) is not sufficient to adjust the sample to a pH of 6-7. In this case the pH value should be adjusted to a pH of 6-7 by dropwise addition of diluted sulphuric acid prior to the test.

## Storage:

Avoid exposing the sticks to sunlight and moisture. Store the kit below  $+30\text{ °C}$  in a dry place.