

Contents:

- 1 Aluminium container with 100 test sticks
- 2 Bottles Chromate-1
- 2 Test tubes

Safety precautions:

Chromate-1 contains 19% nitric acid. Causes burns. Keep out of reach of children. Do not breathe vapour. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye and hand protection.

Method of application:

1. Place test tube into the cavity of the thermoformed lining and fill with 10 drops Chromate-1 (nitric acid).
2. Remove only as many test sticks as are required, and reseal the container immediately after use. Do not touch the test paper zone.
3. Dip the test stick briefly into the neutral to acid test solution and shake of excess liquid. Place test stick into the filled test tube.
4. After 30 seconds remove test stick and compare the test paper zone with the colour scale. In the presence of chromate the test paper turns violet.

If chromium is present as Cr^{3+} , it has to be oxidized to chromate prior to the test as follow: To 10 ml of the test solution add one cone end of a spatula of potassium peroxodisulfate and one drop of a 0.1 m silver nitrate solution. Cook for 10 minutes and cool down again to room temperature. Now apply the test according the instructions for use mentioned above.

Conversion factor: $\text{Cr}^{3+} = \text{CrO}_4^{2-} \times 0.45$

Interferences:

Interferences of molybdate can be removed by addition of oxalic acid to the acid sample solution. Iron (III) ions can be removed by precipitation with sodium hydroxide solution 32%.

Storage:

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