

# SILVER Test Paper

## for the rapid determination of Ag<sup>+</sup>

### Colour reaction:

In the presence of Ag<sup>+</sup> the test paper shows a red-violet spot against a salmon-red background.

### Presentation:

Plastic boxes of 200 strips, each 20 x 70 mm.

### Method of application:

Apply a drop of the weakly acid test solution to the test paper. The drop should be applied with due care, making sure that it forms a true circle. In the presence of Ag<sup>+</sup> a red-violet spot appears; in the presence of small quantities of Ag<sup>+</sup> a red-violet ring. Minute quantities of Ag<sup>+</sup> are detected by submerging the test paper in acetone after the application of the test solution. Thereby the silver reaction spot becomes brownish-red and the background yellow.

**Limit of sensitivity:** 20 mg/l (ppm) Ag<sup>+</sup>

### Interferences:

**Hg<sup>2+</sup> ions** also result in red-violet spots. These can be eliminated or, in the case of large quantities of Hg<sup>2+</sup>, weakened by the following procedure:

- by prolonged submergence in acetone whereby the Hg spot disappears whereas the Ag spot remains,
- by dabbing the test paper with a solution of ammonium chloride in about 0.1 M hydrochloric acid. Thereby the Hg colour reaction disappears forming undissociated HgCl<sub>2</sub> or, in the presence of large quantities of Hg<sup>2+</sup>, becomes considerably weakened and is being washed away around the outer perimeter of the Ag reaction spot. The latter remains unchanged.

**Copper** results in red-violet spots which remain that way, even in acetone. The interference can be eliminated by the same procedure as point b) outlined under Hg<sup>2+</sup>, interference. The Ag<sup>+</sup> ring then becomes visible within the red-violet copper spot when examined against the light.

**Gold, Platinum and Palladium** show similar colour reactions to silver, which can be masked by the addition of potassium cyanide.

### Product data and ordering information

<b>Type</b>	<b>Qualitative test paper</b>
<b>Presentation</b>	<b>Pack of 200 strips 20x70 mm</b>
<b>Color reaction</b>	<b>salmon to red-violet</b>
<b>Limit of sensitivity</b>	<b>20 mg/l (ppm) Ag<sup>+</sup></b>
<b>REF</b>	<b>90732</b>

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