



IRON Test Paper

for the rapid determination of ferrous and ferric iron

Colour reaction:

The presence of iron is indicated by a reddish-brown spot on yellowish-white background.

Method of application:

Apply a drop of the weakly mineral acid test solution (pH 1-2) to the test paper. The presence of Fe ions is indicated by the appearance of a reddish-brown spot. Very high concentrations of iron or strongly acid solutions result in a bluish discolouration in the center of the reaction spot. These discolourations turn reddish-brown upon treatment with 10 % sodium hydroxide solution.

The yellow border around the reaction spot has no significance in the determination of iron.

Limit of sensitivity: 10 mg/l Iron ($\text{Fe}^{2+/3+}$)

Interferences:

Vanadium interferes but only if it is present **as cation**. Vanadates do not interfere. Vanadium cations result in a bluish spot which resists treatment with caustic alkali solution. In the presence of Vanadium and Iron, mixed bluish-red colours appear. This interference cannot be eliminated.

Manganese results in the formation of a blue ring outside the specific reaction spot, which disappears upon treatment with 10 % sodium hydroxide solution.

Molybdate, in larger amounts, results in a yellow ring outside the specific reactions spot for iron, which resists treatment with sodium hydroxide solution.

Titanium compounds result in a yellow spot, which disappears upon treatment with sodium hydroxide solution.

Notes:

For the selective determination of Fe(II) our Dipyriddy paper is recommended.

The IRON-Test Paper also reacts with metallic iron when moistened slightly with distilled water and applied with pressure for about one minute to a metallic surface.