Method for detecting nitrite compounds in water and aqueous solutions involves sampling water from a natural or artificial body of water, from which a 100 cm^3 volume of liquid is drawn using a measuring cylinder, a polymer microfiltration membrane. Made of cellulose acetate with pore sizes of 0.1–1 μm and coated with Griess reagent, the membrane is placed in a holder, the sampled liquid volume is fed onto the membrane using a pump, which is passed through the membrane for at least 20 minutes. Upon completion of the filtration process, the membrane is removed from the holder and its color is visually assessed, the color is compared with tabulated data and the concentration range of nitrite compounds in water is determined.