No.	Compound name	Reaction equation	рН	Rate constant $(L \operatorname{mol}^{-1} \operatorname{s}^{-1})$
230	Hydrogen Ion	$e_{aq}^{-} + H^{+} \longrightarrow H^{-}$ $2$ $2$ $2$ $2$ $acid$ $4.1-4.7$	$2.2 \times 10^{10}$ $2.2 \times 10^{10}$ $2.2 \times 10^{10}$	$2.8 \times 10^{10}$ p.r.; D.k. at 600 nm.; $k$ cor. for I. p.r.; D.k. in HClO <sub>4</sub> ( $10^{-5}$ - $10^{-1}$ mol L <sup>-1</sup> ). p.r.; D.k. at 600 nm; $k$ increases with pressure $\rightarrow 3.5$ kbar, then remains constant $\rightarrow 6.4$ p.r.; D.k.; $k(1.6$ to $2.2) \times 10^{10}$ varied with concn. of added EtOH, KI, and MgCl <sub>2</sub> . p.r.; D.k. at 577 nm, soln. contains H <sub>2</sub> SO <sub>4</sub> or HClO <sub>4</sub> .
		4-5	$2.4\times10^{10}$	p.r.; D.k. at 578 nm ( $HClO_4$ ).